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THE DEVELOPMENT OF UNITED STATES
ANTARCTIC POLICY

by

Barry Merrill Plott

Thesis
P62

THE DEVELOPMENT OF UNITED STATES ANTARCTIC POLICY

A Thesis
Presented to the Faculty
of the
Fletcher School of Law and Diplomacy

by
BARRY MERRILL PLOTT

In partial fulfillment of the requirements for the
Degree of Doctor of Philosophy

March 31, 1969

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PREFACE

This paper is intended to fill the need for a comprehensive study of the nature and development not only of United States Antarctic policy itself but also of the internal arrangements for the formulation and execution of that policy. It is not designed to represent a complete history of American activities in the Antarctic regions. The principal purposes of this study are (1) to determine whether past and present Antarctic policies and the governmental arrangements for their formulation and conduct have served the best interests of the United States and (2) to determine the manner in which these policies and arrangements might be relevant to other issues and geographic areas. It is hoped, in addition, that this study will facilitate an assessment of the political future of the Antarctic regions themselves. Inasmuch as the Antarctic did not become a subject of significant and continuing concern to governments and policy-makers in general until the early 1900's, when claims to national sovereignty were first asserted over Antarctic territory and sustained Antarctic operations first became technologically feasible, the study focuses attention primarily on developments in the twentieth century.

I wish to acknowledge a debt of gratitude to the many members of the faculty and staff of the Fletcher School of Law and Diplomacy who have assisted me at all stages in

the preparation of this paper, and particularly to Professors Robert B. Stewart and Ruhl J. Bartlett for their valuable counsel. I also wish to express my appreciation to Ambassadors Hugh S. Cumming and Paul C. Daniels, both of whom have been intimately connected with Antarctic political affairs and have been kind enough to share their knowledge and experience with me. Finally, I am especially grateful to Dr. Henry M. Dater, the Staff Historian of the United States Naval Support Force, Antarctica, and to Dr. Herman Friis, the Director of the Center for Polar Archives of the United States National Archives, for their assistance in obtaining source material. I alone am responsible, however, for any errors in fact or judgment.

BARRY MERRILL PLOTT

Medford, Massachusetts

March 31, 1969

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INTRODUCTION

The continent of Antarctica is without doubt the most inhospitable area on the surface of the earth. It consists almost entirely of a high plateau covered by an ice sheet which, in places, reaches a thickness of more than a mile. This vast accumulation of land ice leads to temperatures much lower than those recorded in comparable northern latitudes; and the intense cold leads, in turn, to the existence of a permanent high pressure area around the South Pole, causing the great blizzards which regularly sweep the continent.¹ Despite the hostility of the Antarctic environment, however, individuals and nations have possessed important interests in the region for a period of almost two centuries.

The first incentive for large-scale national involvement in the Antarctic was presented not by the barren continent itself but by the Antarctic seas, which are the world's most prolific in marine life. As the Antarctic ice pack freezes each winter, the surrounding water increases in salinity, becomes denser, and sinks to the bottom. Bottom water, rich in nutrients, is then forced upward. As a result of this cycle, the sub-Antarctic waters offer ideal conditions for the existence of marine organisms in great quantities; and these

¹E. W. Hunter Christie, The Antarctic Problem (London: Allen and Unwin, 1951), pp. 16-18; and U. S., Congress, House of Representatives, Committee on Interstate and Foreign Commerce, International Geophysical Year, The Arctic and Antarctica, 85th Cong., 2nd sess., House Rept. No. 1348, Serial No. 12072 (Washington: United States Government Printing Office, 1958), p. 62.

organisms provide food for vast numbers of fish, which, in turn, are able to support large populations of valuable marine mammals, such as seals and whales.²

The Antarctic sealing industry was born as a result of a voyage by the celebrated British navigator, Captain James A. Cook, to the waters of the North Pacific in 1776. While conducting surveys of the Alaskan coast, Cook's men had the opportunity to trade with the natives for seal furs; and upon Cook's later arrival in China, these furs were found to be especially valuable to the Chinese. The news spread quickly, and mariners of all nations began to organize sealing expeditions in great numbers. The known stocks of seals in the North Atlantic had already become seriously depleted by the late eighteenth century, however, and sealers from North Atlantic nations were forced to range far afield. British and American sealers concentrated their efforts in the breeding grounds of the Antarctic, or southern, fur seal (Arctocephalus australis) on the sub-Antarctic islands near to South America and soon dominated the sealing industry in that part of the world. In contrast, the sealing grounds of the North Pacific were not exploited to any significant degree until the forma-

²Robert Morgan, World Sea Fisheries (London: Pitman, 1955), p. 280; and John Lyman, "Antarctica: Antarctic Ocean," Encyclopaedia Britannica (1966 ed.), Vol. 2, p. 5.

tion of the Russian-American Fur Company in 1799.³

For a period of approximately 40 years, Antarctic sealing offered vast opportunities for economic gain. One American sealing captain, Edmund Fanning of Stonington, Connecticut, reported a net profit from one voyage in 1796 of \$52,300 on an initial investment of \$7,867.⁴ By the early 1820's, however, the greed and efficiency of the sealers had resulted in the depletion of stocks of Antarctic fur seals to the point where sealing operations in the region were no longer profitable. The species recovered somewhat during the next 50 years, and the Antarctic sealing industry was revived on a relatively small scale in 1871. By 1900, this revival had resulted in the complete extinction of the Antarctic fur seal everywhere but in the Falkland Islands, where the seals were protected by the British Government.⁵ The Falkland seals have only recently begun to repopulate the sub-Antarctic islands which were once the centers of the sealing industry. New breeding grounds were discovered in the South Shetland, South Orkney, and South Sandwich Islands in the late

³Philip I. Mitterling, America in the Antarctic to 1840 (Urbana: University of Illinois Press, 1959), pp. 19-24.

⁴Ibid., p. 24.

⁵E. W. Hunter Christie, The Antarctic Problem (London: Allen and Unwin, 1951), pp. 123-125. See also "Fur Seals in the South Shetland Islands," The Polar Record, Vol. 11 (January, 1963), p. 473; and M. W. Holdgate, "Fur Seals in the South Sandwich Islands," The Polar Record, Vol. 11 (January, 1963), pp. 474-475.

1950's, but it will be many decades before they again assume commercial importance.⁶

The principal commercial activity conducted in Antarctic waters in 1969 is whaling. The most valuable product of this industry is the oil obtained by rendering the blubber, or fat, of the whale and used in the manufacture of foodstuffs, soap, and lubricants. Whale meat is consumed in Japan, but all attempts to develop markets for this product in other countries have met with failure.⁷ World stocks of whales are rapidly diminishing, however, and the only nations engaged in Antarctic whaling at present are Japan and the Soviet Union. Attempts at regulation of the whaling industry, such as those involved in the Whaling Convention of 1946 and by the International Whaling Commission, have been unsuccessful in obtaining the controls necessary to prevent the whale's eventual extinction.⁸ Unless the world's whaling nations are able to reach an agreement in the near future on severe limitations to the size of annual catches, the whale seems des-

⁶"Fur Seals in the South Shetland Islands," The Polar Record, Vol. 11 (January, 1963), pp. 473-474; "Fur Seals Breeding in the South Orkney Islands," The Polar Record, Vol. 10 (January, 1961), pp. 408-409; and M. W. Holdgate, "Fur Seals in the South Sandwich Islands," The Polar Record, Vol. 11 (January, 1963), pp. 474-475.

⁷Robert Morgan, World Sea Fisheries (London: Pitman, 1955), p. 280.

⁸S. G. Brown, "A Review of Antarctic Whaling," The Polar Record, Vol. 11 (May, 1963), pp. 555-566.

tined to follow the path of the Antarctic fur seal.

Except in regard to whaling, the Antarctic fisheries have remained unexploited due to the lack of suitable markets for fish in the populated continents near to the Antarctic regions.⁹ Despite the fact that millions of people in Africa and South America suffer from protein deficiencies and general malnutrition, the demand for fish in these areas has always been relatively low. Eating habits, while affected significantly by levels of education and per capita income, have deep psychological and cultural roots; and the creation of a demand for a type of food to which people are unaccustomed is a difficult process requiring changes in basic human attitudes.¹⁰ The Antarctic fisheries will probably assume major economic importance in the future, however, as a result of both the increasing world demand for food in general and the growing use of fish protein concentrate as a 'fortifier' for traditional foods.

The existence of significant economic interests in the Continent itself must await advances in technology. Antarctica is known to contain large quantities of copper and low-grade coal, and geologists have also found evidence of deposits of gold, silver, iron, manganese, and uranium. The high

⁹Morgan, World Sea Fisheries, p. 24.

¹⁰Alan D. Berg, "Malnutrition and National Development," Foreign Affairs, Vol. 46 (October, 1967), p. 134.

costs that would be involved in extracting and marketing these resources preclude, however, their becoming commercially important in the foreseeable future.¹¹

Conditions in Antarctica also preclude the establishment of any industry involving animals dependent on the land for their food supplies. Indeed, the largest such animal indigenous to Antarctica is a wingless chironomid fly (Belgica antarctica), which breeds in the brackish coastal waters of the Palmer Peninsula.¹² Not even on the sub-Antarctic islands are there conditions favorable to large-scale animal husbandry, for the non-existence of indigenous herbivorous mammals has led to the evolution of grasses highly sensitive to grazing. Small herds of sheep, cattle, and reindeer introduced by whalers have managed to exist on some of these islands, however, and there has been some thinking on the possibility of introducing some species of Arctic fur-bearing animals.¹³

In summary, the land areas of the Antarctic can be expected to offer little economic advantage for some time. It is

¹¹Walter G. Sullivan, Assault on the Unknown (New York: McGraw-Hill, 1961), p. 336; and E. W. Hunter Christie, The Antarctic Problem (London: Allen and Unwin, 1951), pp. 22-23.

¹²J. L. Gressett and R. E. Leech, "Insect Habitats in Antarctica," The Polar Record, Vol. 10 (May, 1961), p. 503.

¹³M. W. Holdgate and N. M. Mace, "The Influence of Man on the Floras and Faunas of Southern Islands," The Polar Record, Vol. 10 (May, 1961), pp. 476-484.

highly probable, however, that technological advances coupled with the depletion of resources in other areas of the world will at some future date cause the mineral resources of Antarctica to become exploitable on bases competitive with those of other regions; and the hope of future wealth is, in itself, an important factor leading nations to maintain an interest in Antarctic affairs.¹⁴

In the absence of immediate opportunities for direct economic gain, the greatest tangible factor behind Antarctic operations at present is scientific investigation. The importance of Antarctica to science was amply stated in 1958 by the Committee on Interstate and Foreign Commerce of the United States House of Representatives in a report prepared with the assistance of the National Academy of Sciences:

First, it is a large part of our planet--some 6 million square miles in area--and a largely unknown part, too.

Second, it is the largest repository of ice in the world, containing 86 percent of all the world's glacial ice.

Third, it is the world's most efficient cold-air factory, far more so than the Arctic. It also contains the pole or hub of the atmospheric circulation in the Southern Hemisphere.

Fourth, its melting ice creates vast amounts of cold water, which sink to the bottom of the ocean and, as the Antarctic Bottom Current moves across the equator, moves into the Northern Hemisphere.

Fifth, it enables study to be made of the aurora australis and comparisons with the aurora borealis.

¹⁴Howard J. Taubenfeld, "A Treaty for Antarctica," International Conciliation, No. 531 (January, 1961), p. 263.

Sixth, it contains the South Magnetic Poles and affords the opportunity for extensive geomagnetic studies.

Seventh, it presents a stable platform for the study of the thermal and electrical properties of the atmosphere cut off from sunlight for many months, for the study of ionospheric phenomena affecting radio propagation, and for the study of concentrations of cosmic radiation.

Eighth, it offers a stable platform for the tracking of earth satellites having the significant North-South orbit.¹⁵

Southern Hemispheric nations are particularly concerned with Antarctic meteorology, since most of their weather originates on that continent; and the extensive meteorological studies conducted in Antarctica during the 1960's have already caused a marked improvement in weather forecasting in the Southern Hemisphere.¹⁶

In addition to possessing interests related to opportunities for and expectations of economic and scientific gain in the Antarctic, the nations of the world have demonstrated varying degrees of concern with the strategic implications of the region. In 1969, however, the logistic and technical problems that would be involved in the establishment of major military bases in the Antarctic could be surmounted only by the Great Powers; and these nations, with their bal-

¹⁵U. S., Congress, House of Representatives, Committee on Interstate and Foreign Commerce, International Geophysical Year, The Arctic and Antarctica, 85th Cong., 2nd sess., House Rept. No. 1348, Serial No. 12072 (Washington: United States Government Printing Office, 1958), pp. 20-21.

¹⁶Ibid., p. 61.

listic missiles and nuclear submarines, neither have a real need for such bases nor have shown any interest in allocating the immense funds that would be necessary for their construction.¹⁷

At the present time (1969), there are 12 nations with extensive interests in the Antarctic: the United Kingdom, Australia, New Zealand, South Africa, France, Norway, Belgium, Japan, Argentina, Chile, the Soviet Union, and the United States. Despite the varying interests possessed by these nations in the Antarctic and despite the conflicts that existed among them with regard to other areas and other issues, they reached agreement in 1959 on a treaty which attempted to insure that national activities in the region would be solely of a peaceful and cooperative nature.

It would have appeared unlikely, perhaps, that such an agreement would have been possible. Antarctica was not a new area of concern to the nations involved but one in which attitudes, interests, and policies had hardened over a long period of time. Serious international disputes had arisen over questions relating to the region on many previous occasions, and such disputes had twice resulted in the use of armed force. Be that as it may, however, the Antarctic Treaty has been successful up to the present and may well become the model for future peaceful solutions to the problems of

¹⁷Taubenfield, "A Treaty for Antarctica," pp. 261-262.

other areas. An understanding of the developments in Antarctica which culminated in such a significant agreement could therefore be of considerable importance to the world in general.

The successful conclusion of the Antarctic Treaty was achieved largely through the efforts of the United States Government, a government which has, moreover, spent some \$350,000,000 from 1954 to 1969 to engage in Antarctic operations on a scale unprecedented in the history of any nation. It is also of importance, therefore, to discuss and evaluate the nature and development of the United States policies which resulted in both the Antarctic Treaty and such a massive United States commitment in Antarctica itself. A study of these policies is directly relevant not only to the future of the Antarctic regions and the role of the United States in that future but also to the prospects for peaceful international cooperation in other areas of the world.

The history of United States activities in the Antarctic is almost as old as the history of the republic itself. American sealers and whalers were active in Antarctic waters from the late eighteenth century. Little is known of their early discoveries, however, since the pressures of competition led them to keep most of their operations secret.¹⁸

¹⁸U. S., Department of State, United States Policy and International Cooperation in Antarctica (Washington: United States Government Printing Office, 1964), p. 1.

The first recorded penetration of the Antarctic regions by Americans occurred in 1790, when Captain Daniel Greene of New Haven, Connecticut, led a sealing expedition to South Georgia.¹⁹ Thirty years later, another American sealing captain, Nathaniel Palmer of Stonington, Connecticut, may have been the first to discover the Antarctic continent. On November 17, 1820, Palmer logged the sighting of a strait believed to be the Orleans Channel, one side of which is bordered by the mainland of Antarctica.²⁰ Substantial evidence indicates, however, that the coast of Antarctica had been sighted earlier in 1820 by the British surveyor, Edward Bransfield.²¹ In addition, the Soviet Union claims that the Russian navigator, Fabian von Bellingshausen, sighted the continent before the others during his exploring expedition of 1819-1821. There is evidence that Bellingshausen may have done so, but without having realized at the time that he had actually sighted land rather than a seaborne ice formation.²²

With the depletion of known stocks of Antarctic fur

¹⁹Paul Siple, "Antarctica: Exploration and Discovery," Encyclopaedia Britannica (1966 ed.), Vol. 2, p. 7.

²⁰Walter G. Sullivan, Quest for a Continent (New York: McGraw-Hill, c. 1957), p. 23.

²¹Mitterling, America in the Antarctic, p. 41.

²²Terence Armstrong, "Four Eye-Witness Accounts of Bellingshausen's Antarctic Voyage of 1819-21," The Polar Record, Vol. 6 (January, 1951), pp. 85-87.

seals in the early 1820's, various persons connected with the sealing industry petitioned the United States Congress to grant funds for an official expedition to search the Antarctic for new breeding grounds. Other American maritime interests also desired that an official expedition be sent to the Antarctic for the purpose of exploring and surveying the uncharted waters of the region. Congress acted favorably on the requests in May, 1836, appropriating the sum of \$300,000 for use by the Secretary of the Navy in connection with an expedition which would explore the Antarctic regions and certain areas of the Pacific Ocean.²³

The United States Exploring Expedition, consisting of five ships under the command of Lieutenant Charles Wilkes, United States Navy, sailed from Norfolk, Virginia, on August 19, 1838. It was under orders to proceed first to Tierra del Fuego and then attempt to penetrate as far to the south as permitted by the condition of the Antarctic ice pack. On March 3, 1839, the expedition reached Hope Island off the northern tip of the Palmer Peninsula, where it found further progress through the ice impossible. Wilkes' vessels then departed from the Antarctic and separated to conduct surveys of various South Pacific islands, which included Samoa, New Caledonia, the Fijis, and the New Hebrides.²⁴

²³Mitterling, America in the Antarctic, pp. 106-107.

²⁴Ibid., pp. 128-137.

The ships reunited in Sydney, Australia, in November, 1839, and the members of the expedition made preparations for a return to the Antarctic during the upcoming austral summer. The expedition left Sydney on December 25 and sailed south, sighting the Antarctic mainland at an approximate longitude of 140° East on January 30, 1840. The vessels then cruised westward along the coast and reached a longitude of 97° East before a shortage of drinking water forced them to return to Australia.²⁵

The exploits of the Wilkes Expedition led to an increase of American interest in the Antarctic, and the hydrographic data collected by the expedition served to lessen some of the dangers connected with Antarctic voyages. There is no evidence of Wilkes having discovered new sealing grounds, but American whalers began to visit the Antarctic in ever-increasing numbers and soon dominated the whaling industry in that region. In spite of the losses suffered by their fleets during the Civil War, American whalers retained this position of dominance until the 1880's, when both overfishing and the increasing use of mineral oils for purposes of lubrication began to cause a decline in the whaling industry itself.²⁶

With the decline of Antarctic whaling and the post-Civil

²⁵Mitterling, *America in the Antarctic*, pp. 137-146.

²⁶Siple, "Antarctica: Exploration and Discovery," p. 8.

War emphasis on internal development, the attention of the United States turned away from the Antarctic regions. By the beginning of the twentieth century, therefore, the United States Government had neither developed an Antarctic policy nor, for that matter, had recognized a need for such a policy. Indeed, for a period of some 110 years, there had been little in Antarctica of concern to governments in general. Antarctic operations had been conducted primarily by private enterprise, and no nation had attempted to gain exclusive control over any part of the region. This situation did not endure long into the twentieth century, however, for governments soon became directly and continuously involved in Antarctic affairs.

THE ERA OF PASSIVITY: 1904-1933

In the first decade of the twentieth century, the Antarctic whaling industry began to recover rapidly from its state of decline. The invention and development in the late nineteenth century of the harpoon cannon, explosive harpoon, and steam-powered whale catcher had served to create an interest in the smaller and swifter whales which had previously been relatively difficult and uneconomical to catch; and such species, like the blue and fin whales, were known to exist in great numbers in the seas adjacent to Antarctica. The technological advancements that allowed these species to be hunted on an economical basis first reached the Antarctic in 1904, when the Norwegian whaling captain, C. A. Larsen, led a three-ship fleet to South Georgia.¹ Larsen constructed a shore station and processing plant at Grytviken Harbor, South Georgia, in 1905, and the immediate success of this enterprise led to the establishment of additional whaling stations on South Georgia and in the South Shetland Islands.²

The tax and licensing revenues obtainable from such shore-based whaling companies provided a significant incentive for the assertion of national claims in the Antarctic regions, and on July 21, 1908, the United Kingdom issued Letters

¹S. G. Brown, "A Review of Antarctic Whaling," The Polar Record, Vol. 11 (May, 1963), pp. 557-558.

²E. W. Hunter Christie, The Antarctic Problem (London: Allen and Unwin, 1951), pp. 208-209.

Patent proclaiming the existence of British sovereignty over the following territories:

. . . South Georgia, the South Orkneys, the South Shetlands, and the Sandwich Islands, and the territory known as Graham's Land, situated in the South Atlantic Ocean to the south of the fiftieth parallel of south latitude, and lying between the 20th and the 80th degrees of west longitude³

The Letters Patent further stated that the above territories would become dependencies of the British Colony of the Falkland Islands and be administered by the Falkland Governor and Executive Council.⁴ The United Kingdom based its right to take such action on its long history of discoveries, exploration, and occupation in the Antarctic--a history which dated from Captain James Cook's circumnavigation of the Antarctic ice pack during his exploring expedition of 1772-1775. Even before the time of Cook, however, it had been the custom of nations to consider that a valid claim to sovereignty over previously unclaimed territory must be based on the continuous and effective occupation and administration of the

³United Kingdom, "British Letters Patent Appointing the Governor of the Colony of the Falkland Islands to be Governor of South Georgia, the South Orkneys, the South Shetlands, the Sandwich Islands, and Graham's Land, and Providing for the Government Thereof as Dependencies of the Colony.--Westminster, July 21, 1908," British and Foreign State Papers, 1907-1908 (London: His Majesty's Stationery Office, 1912), Vol. 101, p. 76.

NOTE--Graham's, or Graham, Land was the British term for the Palmer Peninsula region.

⁴Ibid., pp. 76-77.

area in question.⁵ This customary view had been sustained by the decisions of various mediators and arbitral commissions during the nineteenth century and remains valid at the present time.⁶

Even though British settlements were then in existence only on South Georgia and on Deception Island in the South Shetlands, the actions taken by British officials pursuant to the Letters Patent were not immediately protested by other nations. British magistrates and customs officers began to exercise jurisdiction throughout the region claimed, and the whaling companies based in that region applied for British licenses and paid taxes to the British Government.⁷ Some international concern was expressed, however, over the word-

⁵Gustav Smedal, Acquisition of Sovereignty over Polar Areas, C. Meyer, trans. (Oslo: Jacob Dybwad, 1931), p. 16.

⁶See, for example, Award of the United States and Venezuelan Claims Commission in the Case of Gowan and Copeland vs. Venezuela, December 5, 1885, in John Basset Moore, History and Digest of the International Arbitrations to Which the United States Has Been a Party (6 vols., Washington: Government Printing Office, 1898), Vol. 4, pp. 3355-3359; Statement of Pope Leo XIII, Mediator in the Case of the Caroline Islands, October 22, 1885, in Ibid., Vol. 5, pp. 5043-5044; and Award in the Case of the Cravairola Boundary, September 23, 1874, in Ibid., Vol. 2, pp. 2027-2049.

For more recent decisions, see "The Island of Palmas (Miangas) Arbitral Award of the Permanent Court of Arbitration, April 4, 1928," American Journal of International Law, Vol. 22 (October, 1928), pp. 867-912; and "Arbitral Award on the Subject of the Difference Relative to the Sovereignty over Clipperton Island--Decision Rendered at Rome, January 28, 1931," American Journal of International Law, Vol. 26 (April, 1932), pp. 390-394.

⁷Christie, Antarctic Problem, pp. 243-244.

ing of the Letters Patent. The British claim was apparently interpreted by Argentina and Chile as involving all the territory south of 50° South within the meridians cited, thus including part of the South American mainland.⁸ Such an interpretation appears to have no basis; the Letters Patent were specific in listing the areas claimed, failing only to delimit the "territory known as Graham's Land" on the Antarctic Continent. The meridians cited served only to give the general location of the British-claimed territories.⁹

In any event, the United Kingdom pronulgated additional Letters Patent in 1917. These Letters Patent were designed both to dispel any doubts regarding the limits of the British claim in the Antarctic and to extend that claim, and they declared the existence of British sovereignty over "all islands and territories whatsoever" between 20° West and 50° West, south of 50° South, and between 50° West and 85° West,

⁸Christie, *Antarctic Problem*, p. 243.

⁹This criticism of the Letters Patent continues up to the present. See, for example, Argentine Minister of Foreign Affairs and Worship, Juan A. Bramuglia, to British Ambassador to Argentina, Sir Reginald A. Leeper, January 28, 1948, in "Antarctic Claims--Recent Diplomatic Exchanges between Great Britain, Argentina, and Chile," *The Polar Record*, Vol. 5 (January-July, 1948), pp. 233-236. Referring to the Letters Patent of 1908, Bramuglia stated that "it regarded Patagonia as belonging to the British."

south of 58° South.¹⁰

This practice of claiming pie-shaped areas extending to the Pole is termed the 'sector principle' and was first proposed by a Canadian senator in 1907 for use in the Arctic regions. According to the principle as originally stated, any nation extending into a polar region has a right to sovereignty over all the territory within the spherical triangle drawn between the eastern and western extremities of that nation and the pole in question. In practice, alleged limits of coastal exploration were also used by the United Kingdom and subsequent claimants either to define or extend national sectors in the Antarctic. The sector principle has since been utilized by all Antarctic claimants but Norway--it being disadvantageous to the latter's Arctic interests. The principle has never been the subject of adjudication, however, and is without apparent validity in international law.¹¹

Despite their questionable validity, however, the British

¹⁰United Kingdom, "British Letters Patent, Passed under the Great Seal of the United Kingdom, Providing for the Further Definition and Administration of Certain Islands and Territories as Dependencies of the Colony of the Falkland Islands.--Westminster, March 28, 1917," British and Foreign State Papers, 1917-1918 (London: His Majesty's Stationery Office, 1921), Vol. 111, pp. 16-17. *Italics mine.*

¹¹Oscar Svarlein, "The Sector Principle in Law and Practice," The Polar Record, Vol. 10 (September, 1960), p. 260; and Smedal, Acquisition of Sovereignty over Polar Areas, pp. 54-64.

claims in the Antarctic continued to cause no international reactions, either in the form of protests by nations which might consider the British actions as an infringement upon their own rights in the region or in the form of national claims to other Antarctic territories. Perhaps emboldened by this lack of opposition, the United Kingdom proceeded to extend its claims further. On July 30, 1923, a British Order-in-Council was issued, declaring that British sovereignty existed over the Antarctic sector within 160° East, 150° West, and 60° South. This sector was named the Ross Dependency and placed under the administrative authority of New Zealand.¹²

Thus, within a period of 15 years the United Kingdom had proclaimed the existence of its sovereignty over one-third of the Antarctic Continent and many sub-Antarctic islands and archipelagos; and even though the British claims included regions which had been discovered and explored by American citizens, there appears to be no evidence that any organ of the United States Government was even considering the matter. The implications of the British actions did not remain unnoticed by all the governments of the world, however, for nine months after the British assertion of

¹²British Order-in-Council of July 30, 1923, in U. S., Naval War College, "Declarations concerning Antarctic Territories," International Law Documents, 1948-49 (Washington: United States Government Printing Office, 1950), p. 235.

sovereignty over the 'Ross Dependency,' the Antarctic claims race gained another participant--the Republic of France. On March 27, 1924, a French Presidential Decree reserved for French citizens the mining, hunting, and fishing rights in the Crozet Archipelago and "Adelie or Wilkes Land" and the territorial waters thereof.¹³ The following November, another French Presidential Decree placed the above territories, in addition to Saint Paul and Amsterdam Islands and the Kerguelen Archipelago, under the administrative authority of the Governor General of Madagascar.¹⁴

France had been one of the first nations active in Antarctic waters. In the late eighteenth century Bouvet Island and the Kerguelen and Crozet Archipelagos were discovered by the Frenchmen whose names they respectively bear, and in 1840 a French expedition under J. S. C. Dumont D'urville sighted the Antarctic Continent at an approximate latitude of 140° East ten days before the arrival of the Wilkes Expedition in

¹³French Presidential Decree of March 27, 1924, in Naval War College, Documents, 1948-49, p. 228.

NOTE--It is necessary to comment on the confusing nature of the term 'Wilkes Land.' The United States Geographic Board considered Wilkes Land to be the region between 96° East and 155° East. The above French Presidential Decree used the term "Adelie or Wilkes Land," which was later delimited by France as the area between 136° East and 142° East. At the Imperial Conference of 1926 (below), the British would designate the region to the west of Adelie Land as Wilkes Land. David Hunter Miller, "National Rights in the Antarctic," Foreign Affairs, Vol. 5 (April, 1927), p. 508.

¹⁴French Presidential Decree of November 21, 1924, in Naval War College, Documents, 1948-49, pp. 229-230.

the same region. Dumont D'urville did not explore as far to the west as Wilkes, but he landed on a sub-Antarctic island and claimed both it and the adjacent Antarctic coast for France, naming the continental territory for his wife, Adelie.¹⁵

France made no delimitation of the precise extent of Adelie Land in 1924, a report of the French Minister of Colonies indicating that France's primary interest was in the exploitation of the resources of the adjacent seas. This report further stated that France had not previously asserted its sovereignty in the Antarctic because of ignorance of the region's value and that, in addition, France had not deemed it necessary "to confirm by the establishment of an effective authority the rights of sovereignty which France had long ago acquired" over the territories discovered by its navigators.¹⁶

Soon after the assertion of the French claims, the United States made its first official statement on the Antarctic claims situation. This statement was not occasioned by the actions of the two claimants, however, but by Norway. On February 25, 1924, the Norwegian Minister to the United States, Helmer H. Bryn, had sent a note to Secretary of State Hughes, commenting on an article which had recently appeared in The

¹⁵Walter G. Sullivan, Quest for a Continent (New York: McGraw-Hill, c. 1957), p. 29.

¹⁶Report of French Minister of Colonies, November 21, 1924, in Naval War College, Documents, 1948-49, pp. 228-229.

Rochester (New York) Herald. According to the article in question, the Norwegian explorer, Roald Amundsen, had agreed that the United States might claim any land he might discover on his forthcoming Arctic expedition; and the Norwegian Minister informed the Secretary of State that Amundsen denied having made such an agreement and that "all the land that Mr. Amundsen may discover will, of course, be taken in the name of His Majesty, the King of Norway."¹⁷

In his reply to Minister Bryn of April 2, 1924, Secretary Hughes stated what has become known as the Hughes Doctrine on the Polar Regions:

Today, if an explorer is able to ascertain the existence of lands still unknown to civilization, his act of so-called discovery, coupled with a formal taking of possession, would have no significance, save as he might herald the advent of the settler; and where for climatic or other reasons actual settlement would be an impossibility, as in the case of the polar regions, such conduct on his part would afford frail support for a reasonable claim of sovereignty.¹⁸

Six weeks later, Secretary Hughes stated the relevance of his doctrine to Antarctica in a reply to a note from an

¹⁷Norwegian Minister to Secretary of State, February 25, 1924, in U. S., Department of State, "Correspondence between Norwegian Minister and United States Secretary of State regarding Polar Claims," Foreign Relations of the United States, 1924 (Washington: United States Government Printing Office, 1939), Vol. 2, p. 518.

¹⁸Secretary of State to Norwegian Minister, April 2, 1924, in Ibid., Vol. 2, pp. 519-520.

'inquiring citizen, who had suggested that the United States base a claim to sovereignty in the Antarctic upon the rights allegedly acquired by the official Wilkes Expedition. Hughes admitted that whalers of British and other nationalities anchored along the coast of the Palmer Peninsula during the summer, but he added:

So far as this Department is informed the exploration of parts of the Antarctic Continent . . . has not been followed by permanent settlement upon any part of the Continent.¹⁹

Hughes' statements did not constitute a policy but rather expressed a belief in the inability of other nations to fulfill what the State Department interpreted as the contemporary requirements for the acquisition of sovereignty over polar areas. Moreover, there is considerable doubt as to the validity of this interpretation. Not permanent settlement per se but rather effective occupation, coupled with some exercise of national jurisdiction, had been required as a basis for a valid territorial claim in the custom of nations. The actual extent of the occupation and administration that had been required in previous cases had varied in relation to the strength of the claims of other nations to the same territory. In the absence of significant competition, nations had based

¹⁹Secretary of State to A. W. Prescott, File No. 811.014/191, May 13, 1924, U. S. National Archives, Dept. of State.

successful territorial claims on a minimum of concrete activities.²⁰ This view was subsequently sustained by the Permanent Court of International Justice, which stated in 1933:

It is impossible to read the records in cases as to territorial sovereignty without observing that the tribunal has been satisfied with very little in the way of the exercise of sovereign rights, provided the other State could not make out a superior claim.²¹

It therefore appears that at least a portion of the British claim to Antarctica might well have been successfully defended in accordance with the standards of international law at the time of Hughes; and if the exercise by other nations of sovereign rights in the Antarctic was not believed to be in the best interests of the United States, the State Department should have taken or recommended, as the case may be, action toward either establishing the bases for a superior United States claim or obtaining some alternative to national claims themselves. At this point, however, there is no evidence of any attempt on the part of the State Department to formulate specific policies with regard to the Antarctic or even to ascertain the nature of any United States interests

²⁰See, for example, Award in the Case of the Cravairola Boundary, September 23, 1874, in John Basset Moore, History and Digest of the International Arbitrations to Which the United States Has Been a Party (6 vols., Washington: Government Printing Office, 1898), Vol. 2, pp. 2027-2049.

²¹Permanent Court of International Justice, Legal Status of Eastern Greenland, Judgment of April 5, 1933, Series A/B, No. 53, p. 46.

that might be involved in the region. Hughes offered no alternative to the developing regime of separate national claims and gave the implication that if nations were able to establish settlements in the Antarctic in accordance with his criteria, the United States would recognize their claims--all without having decided whether such claims would be advantageous to United States interests or, again, what those interests might be. Finally, Hughes did not take into consideration the possibility of technological advances which could facilitate the fulfillment of even his criteria of permanent settlement.

With regard to the above proposal for the establishment of a United States claim in the Antarctic, the State Department assumed the position that an act of Congress "assertative in the domestic sense" would be necessary before the Department could declare that the United States "possessed a right to sovereignty" in the region.²² The State Department under Hughes was apparently consistent in a belief that Congress rather than the executive had the power to acquire territory even though the Department under previous administrations had declared on several occasions that the United States claimed jurisdiction over certain Pacific and Caribbean islands by virtue of their having been reserved for various purposes

²²Secretary of State to A. W. Prescott, File No. 811.014/101, May 13, 1924, U. S. National Archives, Dept. of State.

by executive order.²³ The expressed reluctance of the State Department to declare that the United States either did or did not possess a 'right to sovereignty' in the Antarctic is another matter entirely, however, and can only be interpreted as an attempt by the Department to absolve itself from responsibility in matters concerning a region to which it had consistently paid little attention.

With regard to other unclaimed areas of the world, the State Department under Hughes had not awaited congressional action before declaring that the United States possessed 'rights to sovereignty' and had even, on occasion, initiated action toward the formal extension of United States jurisdiction. Indeed, on May 22, 1924, Secretary Hughes sent a letter to President Coolidge, in which he enumerated the rights that the United States possessed over Swain's Island, an atoll in the Pacific Ocean, and recommended the submission to Congress of a joint resolution formally extending United

²³With regard to Wake and Midway Islands, see Acting Secretary of State David J. Hill to Perry, Mason and Company, April 18, 1900, in John Bassett Moore, A Digest of International Law (8 vols., Washington: United States Government Printing Office, 1906), Vol. 1, p. 555. With regard to Navassa Island, see Opinion of the Solicitor of the State Department, October 25, 1917, in Green H. Hackworth, Digest of International Law (8 vols., Washington: United States Government Printing Office, 1940), Vol. 1, p. 514.

States sovereignty over that island.²⁴ Thus, regardless of which branch of the United States Government was believed by the State Department to have the power to actually acquire territory, the Department was not generally reluctant to express opinions on the nature of rights possessed by the United States over such territory. Moreover, even though the Department might not have wished to comment at that time on the nature of such rights in the Antarctic, the role of the Department in the conduct of foreign relations did give it the responsibility to concern itself with studies, plans, and policies regarding regions in which the United States possessed long histories of involvement. In the case of Antarctica, however, there is no evidence of any action whatsoever being taken by the State Department in the early 1920's.

The only organ of the United States Government to attempt at this time to ascertain the nature of American interests in the Antarctic claims situation was the Navy Department, which, in contrast to the State Department, believed that sovereignty accrued from mere discovery and that the United States therefore possessed sovereignty over the territory which had first been sighted by the Wilkes Expedition. As a result of the French claim to a portion of this terri-

²⁴Secretary of State to President, May 22, 1924, in Green H. Hackworth, Digest of International Law (8 vols., Washington: United States Government Printing Office, 1940), Vol. 1, pp. 482-485.

tory, the Navy's General Board conducted a brief study on the Antarctic and concluded that the Navy Department was "generally interested in the sovereignty of outlying areas on which American sovereignty has been established, particularly in view of the possibility of the discovery of fuel and other mineral deposits."²⁵ The study contained no recommendations for action in response to the French claim, however, and the Navy Department showed no further interest in the matter.

The United States Government's apparent lack of concern over the Antarctic claims situation was due primarily to the fact that these claims did not constitute a direct and immediate threat to American interests. The only American expeditions to visit the Antarctic since 1840 had been engaged in the exploitation of Antarctic sea life, and none of these expeditions had constructed permanent facilities in the region. Moreover, even though the Navy Department had recognized an interest in the future exploitation of Antarctic minerals, the possibility of conducting sustained operations of any nature on the Antarctic Continent itself appeared extremely remote in the early 1920's. The absence of immediate incentives for involvement in Antarctic affairs,

²⁵U. S., Navy, General Board, Sovereignty of Crozet Islands and Wilkes Land, Study No. 414-5, Serial No. 1225, December 9, 1924, Archives of the U. S. Naval History Division, Dept. of the Navy.

however, does not absolve the United States Government from criticism for its failure to demonstrate any significant concern with the nature of the United States rights and interests in the Antarctic during that period and for its failure to consider steps toward protecting such rights and interests as were believed to exist.

Situations developed in the late 1920's, however, which caused the United States to become more concerned with Antarctic matters. Although even then the United States did not develop a coherent policy in regard to Antarctica, it began to react more vigorously to the Antarctic policies of other nations. The principal factors leading to this increase in concern were the following: (1) Richard E. Byrd and his Antarctic expedition, (2) the British Imperial Conference of 1926 and subsequent diplomatic developments, (3) the controversy over the use of the sector principle by claimants of Arctic territories, and (4) the heightening of the Antarctic claims race by the addition of two more participants--Argentina and Norway.

A large amount of the credit for the development of an active American concern with Antarctica is deserved by one American--Richard Evelyn Byrd. Byrd had been trained as a naval aviator during World War I and had later become interested in long-range flying. He received experience in polar aviation in 1925 as the commander of the naval aviation unit assigned to the MacMillan Arctic Expedition and, as a result

of this experience, conceived the idea of conducting exploratory flights in Antarctica. Unable to secure financial support for an Antarctic expedition from the United States Government, Byrd was forced to seek private backing. Since his proposed program included extensive scientific research, he succeeded in obtaining some financial assistance from the National Geographic Society. His principal support, however, came from businessmen and particularly from John D. Rockefeller and Edsel Ford, who were his personal friends. In all, Byrd's 1928 expedition cost approximately \$800,000.²⁶

Byrd intended to depart from the United States in August, 1928, and make Dunedin, New Zealand, his last port of call before arriving in Antarctica. To save space on the expedition's vessels, Byrd wished to ship certain supplies ahead to Dunedin and load them there; and he requested the assistance of the State Department in obtaining the permission of New Zealand authorities to admit his supplies free of duty and to store them for reshipment.²⁷ The State Department agreed to cooperate and was successful in obtaining the customs exemp-

²⁶Sullivan, Quest, pp. 79-80.

²⁷Byrd to Secretary of State, File No. 031 Byrd South Polar Expedition/25, July 5, 1928, U. S. National Archives, Dept. of State.

tions desired.²⁸ After his arrival in Dunedin, however, Byrd informed Secretary Kellogg that the New Zealand Government was withholding its assistance because it had not been notified by the State Department that the expedition was "accredited" by the United States Government.²⁹ It was apparent in this case that the New Zealand Government was fishing for some sort of official statement that could be used as proof of an implied United States recognition of New Zealand authority over certain areas of the Antarctic, and the State Department carefully avoided making such a statement. Secretary Kellogg simply instructed the American Consul in Wellington to inform the New Zealand Government that the Byrd Expedition was entirely of a scientific nature and that the United States hoped that New Zealand might find it possible to assist the expedition in accomplishing its purposes.³⁰ With the subsequent efforts of the American Consulate in his behalf, Byrd began to receive the degree of cooperation desired from New

²⁸Assistant Secretary of State, William R. Castle, Jr., to Consul General in Wellington, Will L. Lowrie, File No. 031 Byrd South Polar Expedition/27, July 11, 1928, U. S. National Archives, Dept. of State; and Consul-in-Charge in Wellington, Bernard Gottlieb, to Secretary of State, File No. 031 Byrd South Polar Expedition/30, August 24, 1928, Ibid.

²⁹Byrd to Secretary of State, File No. 031 Byrd South Polar Expedition/36, undated telegram (received November 12, 1928), Ibid.

³⁰Secretary of State to Consul-in-Charge in Wellington, File No. 031 Byrd South Polar Expedition/37, telegram, November 13, 1928, Ibid.

Zealand authorities.³¹

The activities planned by the Byrd Expedition also led to an attempt by the United Kingdom to achieve United States recognition of its Antarctic claims. Immediately prior to Byrd's departure from New Zealand, the British Government sent a note to the State Department, offering the expedition the use of British facilities in Antarctica--which facilities were in fact non-existent.³² Enclosed with the British note was a copy of the Summary of Proceedings of the Imperial Conference of 1926. This conference had been led by Australian insistence to consider the question of British policy in the Antarctic regions and had decided that a British "title" to various unclaimed Antarctic 'lands' already existed by virtue of discovery.³³ The Conference failed to indicate the precise extent of these lands and was perhaps referring to coastal territories only; but since all previous British Antarctic claims had been extended to the Pole in accordance with the sector principle, the Imperial Conference can be considered to have extended the sphere of British interest to virtually

³¹New Zealand Minister of Internal Affairs to American Consul General in Wellington, File No. 031 Byrd South Polar Expedition/45, November 26, 1928, U. S. National Archives, Dept. of State.

³²British Ambassador to Secretary of State, File No. 031 Byrd South Polar Expedition/38, November 17, 1928, Ibid.

³³Summary of Proceedings of the Imperial Conference, 1926, in Naval War College, Documents, 1948-49, p. 237.

the entire Antarctic Continent. Moreover, Wilkes Land was one of the 'lands' concerned and was expressly noted as "the area which lies to the west of Adelie Land and which on its discovery by the Australian Antarctic Expedition in 1912 was denominated Wilkes Land."³⁴ The British thus indicated acquiescence in the French claim to Adelie Land, although Australia was somewhat opposed to this action.³⁵

The acceptance by the United States Government of the offer of the use of British facilities could have been considered by an international tribunal as a tacit recognition of British acts of occupation in the Antarctic, and the State Department therefore took no action regarding the offer. The British note itself, however, constituted the first official notice of British Antarctic claims received by the United States Government; and Under Secretary of State J. Reuben Clark drafted a strongly-worded reply. Clark's draft was not immediately approved, and Secretary Kellogg soon left office, as did Clark himself on June 19, 1929. Secretary Stimson delayed any reply to the British note until the following November, when he simply acknowledged its receipt and stated

³⁴Summary of Proceedings of the Imperial Conference, 1926, in Naval War College, Documents, 1948-49, p. 237.

³⁵David Hunter Miller, "National Rights in the Antarctic," Foreign Affairs, Vol. 5 (April, 1927), p. 508.

that he had read its contents.³⁶ It is important to consider the Clark draft, however, for this and other memoranda afford an insight into the serious thought that the State Department under Kellogg was beginning to give to the Antarctic claims situation.

In his draft, Clark stated that the United States would not deny to any nation rights or titles gained in accordance with international law through discovery but that the United States would not admit that such rights and titles could be perfected by either temporary occupation or unimplemented declarations, decrees, or laws.³⁷ This recognition of the existence of some rights in Antarctica accruing from discovery was intended by the State Department to leave open the possibility of a United States claim to a "preferential right" to occupy areas discovered by American citizens.³⁸

Clark's draft also contained the first references to the

³⁶U. S., Congressional Record, 71st Cong., 1st sess., Vol. 72, pt. 11 (July 1, 1930), p. 12180.

³⁷Draft by Under Secretary of State of Reply to British Embassy's Note of November 17, 1928, undated, in Memorandum by Anna A. O'Neill, Assistant to the Under Secretary of State, File No. 800.014 Antarctic/4, February 28, 1929, U. S. National Archives, Dept. of State.

—NOTE--Clark's draft apparently does not exist as a separate document in the United States National Archives but is quoted in full in the above memorandum, which also contains comments by O'Neill herself. References to Clark's statements are so indicated.

³⁸Memorandum by Anna A. O'Neill, Assistant to the Under Secretary of State, File No. 800.014 Antarctic/4, February 28, 1929, U. S. National Archives, Dept. of State.

question of the relevance of the Monroe Doctrine to Antarctica. In this regard, Clark noted that various Antarctic territories claimed by the United Kingdom were located in the Western Hemisphere and continued:

I need but suggest that the people of the United States have always entertained definite views concerning the acquisition of sovereign rights in the unclaimed and unsettled lands of this Hemisphere.³⁹

It is to be noted that the Monroe Doctrine was not cited by name, although the allusion to it was obvious. There was some difference of opinion within the State Department regarding its applicability to Antarctica. Although there is no evidence to indicate that President Monroe considered his statements to apply to Antarctica when he spoke of the American Continents, he did state that the United States should consider any attempt by European Powers "to extend their system to any portion of this Hemisphere" as dangerous to its "peace and safety."⁴⁰ Regardless of President Monroe's

³⁹Draft by Under Secretary of State of Reply to British Embassy's Note of November 17, 1928, undated, in Memorandum by Anna A. O'Neill, Assistant to the Under Secretary of State, File No. 800.014 Antarctic/4, February 28, 1929, U. S. National Archives, Dept. of State.

NOTE--Clark's well-known Memorandum on the Monroe Doctrine was submitted on December 17, 1928, while the British note regarding Antarctica was under consideration by the State Department.

⁴⁰The Monroe Doctrine: Message of President Monroe to Congress, December 2, 1823, in Ruhl J. Bartlett, ed., The Record of American Diplomacy (New York: Knopf, 1964), pp. 181-183. *Italics mine.*

original intentions, however, the United States has never invoked the Monroe Doctrine in a case involving Antarctica.

Clark concluded his draft with a statement to the effect that the United States did not recognize any means of acquiring sovereignty over territory other than those well established in the practice of nations.⁴¹ In all, Clark's draft embodied the basic principles of the Hughes Doctrine but indicated a greater concern over American rights in Antarctica than had been demonstrated by the State Department under Hughes.

The State Department continued to show no interest, however, in the formal assertion of United States Antarctic claims. On October 28, 1928, Byrd's personal representative had written Secretary Kellogg, requesting information on the Department's attitude toward Byrd's claiming for the United States any unclaimed land he might discover.⁴² A reply was made on December 5 by Under Secretary Clark, who simply acknowledged the receipt of the letter and expressed the Depart-

⁴¹Draft by Under Secretary of State of Reply to British Embassy's Note of November 17, 1928, undated, in Memorandum by Anna A. O'Neill, Assistant to the Under Secretary of State, File No. 800.014 Antarctic/4, February 28, 1929, U. S. National Archives, Dept. of State.

⁴²Byrd's Personal Representative to Secretary of State, October 10, 1928, in U. S., Department of State, "Antarctic Expedition of Commander Richard E. Byrd," Foreign Relations of the United States, 1928 (Washington: United States Government Printing Office, 1943), Vol. 2, p. 1002.

ment's reluctance to comment on the matter.⁴³

In late December, 1928, Byrd arrived in Antarctica and established his expedition at the Bay of Whales in New Zealand's Ross Dependency. Byrd's base, named Little America, was the most complex yet constructed in Antarctica; and the expedition's shore party of 42 men became the largest group to winter-over in Antarctica up to that time. In addition, the expedition had brought three ski-equipped airplanes; and on January 17, 1929, Byrd made the first of his historic exploratory flights.⁴⁴

By the end of the first operating season, Byrd and other members of his expedition had sighted a minimum of 20,000 square miles of previously unknown territory. Byrd, in addition, had claimed the region east of 150° West for the United States, naming it Marie Byrd Land for his wife.⁴⁵ During the Antarctic winter of 1929, the expedition remained at Little America and made preparations for the second season of explorations. The primary objective of the expedition was achieved late in the following spring, when Bernt Balchen, Harold June, Ashley McKinley, and Byrd himself became the

⁴³Under Secretary of State to Byrd's Personal Representative, December 5, 1928, in Foreign Relations, 1928, Vol. 2, p. 1004.

⁴⁴Sullivan, Quest, pp. 80-81.

⁴⁵United States Navy Press Release, File No. 800.014 Antarctic/64, June 28, 1929, U. S. National Archives, Dept. of State.

first men to fly over the South Pole.⁴⁶ Byrd returned to the United States in early 1930 and received a hero's welcome. He was promoted from commander to rear admiral on the Navy's retired list,⁴⁷ and all the members of the expedition were awarded medals for their "heroic and undaunted services" by a joint resolution of Congress.⁴⁸

Byrd's greatest achievement was his introduction of twentieth-century technology into Antarctica. His base, unlike those of previous Antarctic expeditions, had been equipped with electric lights and telephones and had remained in almost constant radio contact with the outside world. He had also demonstrated the feasibility of air operations in Antarctica, having been able to explore and photograph more territory in an hour than could have been covered by dog team over a period of months.⁴⁹ The Byrd Expedition had also achieved the effect of virtually forcing the United States to become involved in Antarctic politics and diplomacy, inasmuch

⁴⁶Paul Siple, 90° South (New York: G. P. Putnam's Sons, c. 1959), pp. 44-46.

⁴⁷U. S., Statutes at Large, Vol. 46 (1930), p. 1633. "Act Providing for the Advancement of Commander Richard E. Byrd, United States Navy, Retired, to the Grade of Rear Admiral on the Retired List of the Navy."

⁴⁸U. S., Statutes at Large, Vol. 46 (1930), p. 379. "Act Authorizing the Presentation of Medals to the Officers and Men of the Byrd Antarctic Expedition."

⁴⁹Sullivan, Quest, pp. 80-82.

as the existence in Antarctica of an American expedition, albeit an unofficial one, had presented the State Department with problems it simply could not ignore. Although no official action was taken in regard to Byrd's unofficial claims activity, it did appear that the State Department was beginning to give serious thought to American rights in Antarctica. This increase in official American interest in Antarctica, however, was not due entirely to the activities of the Byrd Expedition, for there were additional factors leading the United States Government to become more concerned with Antarctic affairs during the period from 1926 to 1930.

The first of these additional factors was the use of the sector principle in the Arctic regions by the Soviet Union. In November, 1916, Russia had informed the United States of its claims to sovereignty over several islands in the Arctic Ocean; and these claims had been based on the fact of the islands' location between Siberia and the North Pole.⁵⁰ Ten years later, in April, 1926, the Soviet Union asserted a formal claim to all territory, discovered or undiscovered, located to the north of the Soviet Union between 32° 4' 35" East and 168° 49' 30" West.⁵¹

⁵⁰Russian Ambassador in Washington to Secretary of State, November 13, 1916, in Hackworth, Digest, Vol. 1, p. 461.

⁵¹Memorandum of Conversations between Under Secretary of State and Norwegian Minister in Washington, June 4 and June 12, 1926, in *Ibid.*, Vol. 1, p. 461.

Although the United States State Department had not reacted to the use of the sector principle in Antarctica in 1917, the Department demonstrated extreme concern over its use in the Arctic, where the United States possessed significant direct interests. In fact, one of the primary reasons for Under Secretary Clark's emphasis on traditional principles of international law in his draft reply to the United Kingdom had been the desire of the State Department to safeguard the United States against any use whatsoever of the sector principle, particularly since an acceptance of the principle in Antarctica would weaken the case of the United States against it in the North.⁵² This was one of several instances in which the actions of the United States in regard to Antarctica were directly related to that nation's important interests in the Arctic.

The Navy Department was also concerned over the use of the sector principle in the Arctic and conducted a study on the matter. The study concluded that the sector principle had no justification in the custom of nations and was nothing more than an arbitrary manner of dividing large expanses of territory among several nations.⁵³ The results of this study

⁵²Memorandum by Anna A. O'Neill, Assistant to the Under Secretary of State, File No. 800.014 Antarctic/4, February 28, 1929, U. S. National Archives, Dept. of State.

⁵³Secretary of the Navy to Secretary of State, September 23, 1929, in Hackworth, Digest, Vol. 1, p. 464.

were submitted to the State Department on September 23, 1929, and subsequently formed an important basis of United States policies with regard to both polar regions.

Also of concern to the United States Government during this period was the assertion of Antarctic claims by two more nations--Argentina and Norway. Argentine interest in the Antarctic dated from December, 1901, when the privately-financed Swedish South Polar Expedition, under the leadership of Dr. Otto Nordenskjold, arrived at the port of Buenos Aires en route to Antarctica. To facilitate its own scientific work, the expedition made arrangements with the Argentine Government for the coordination of observations with a station manned by Argentine scientists on Staten Island, located off the eastern tip of Tierra del Fuego. The Argentine Government, in addition, assigned a naval lieutenant to serve with the Swedish expedition as an assistant scientist.

The Swedish expedition's vessel, Antarctic, became crushed in the Antarctic ice pack while attempting to reach the shore parties the following year; and when the ship had not returned to Buenos Aires by March, 1903, it became apparent that some misfortune had befallen the expedition. As a nation near to Antarctica, Argentina felt compelled to attempt the rescue, especially since one of its citizens was involved. As soon as the winter ice had broken up enough to make an approach to Antarctica feasible, an Argentine gunboat, the A. R. A. Uruguay, steamed south; and this voyage constituted

the first visit of an Argentine ship to Antarctic waters. Rescue was effected on November 8, 1903; and the Uruguay's feat--particularly commendable since the gunboat had not been designed for polar operations and had no special protection against the ice--was acclaimed in Argentina and throughout the world.⁵⁴

Also in 1903, the Scottish National Research Expedition returned to Buenos Aires after having wintered-over on Laurie Island in the South Orkneys; and the leader of this expedition, Dr. William Bruce, proposed that the Argentine Government establish a permanent meteorological observatory on Laurie Island. The Argentine Meteorological Service strongly backed the proposal, and an agreement was reached whereby Argentina would staff and maintain the observatory in return for the Scots' initial assistance in training and transportation. Argentina then took formal possession of the South Orkneys by executive decree and has maintained the observatory continuously since 1904.⁵⁵

Except with regard to the station on Laurie Island, Argentine concern with the Antarctic appeared to lessen after 1904. Although the British claims of 1907 and 1918 included the South Orkneys and other Antarctic territories of interest to Argentina, the Argentine Government took no immediate

⁵⁴Christie, Antarctic Problem, pp. 163-174.

⁵⁵Ibid., pp. 175-178.

steps to extend its own official claims and made no protest to the United Kingdom. A proposal by the Argentine Meteorological Service to establish another sub-Antarctic observatory was disapproved by the Argentine Government, and a 1925 British proposal of joint scientific operations in Antarctica received no serious consideration in Buenos Aires.⁵⁶

The first assertion of Argentine Antarctic claims beyond that to the South Orkneys came in 1927, when the Argentine Government declared in a note to the Universal Postal Union that Argentina refused to recognize the validity of British postage stamps on mail from either the South Orkneys or South Georgia. This note also included the first announcement of an Argentine claim to a portion of the Antarctic Continent:

Argentine territorial jurisdiction extends de jure and de facto to the continental area, to the territorial sea and the islands situated along the maritime coast, to a part of the Island of Tierra del Fuego, to the Archipelagos of Los Estados, Ano Nuevo, South Georgia, and South Orkneys, and to polar territories which have not been delimited.⁵⁷

Though regimes would change and various political philosophies would gain and lose pre-eminence in Argentina itself, Argentine Antarctic policy would remain constant over

⁵⁶Christie, Antarctic Problem, p. 267.

⁵⁷Director of Argentine Posts and Telegraphs to Director of Universal Postal Union, September 14, 1927, in Naval War College, Documents, 1948-49, p. 218.

the next 32 years in a vain and continuing attempt to achieve full sovereignty over the Antarctic regions closest to Argentine shores. This policy would be proclaimed in the highest councils of international organizations and carried to the brink of war with the United Kingdom, and the United States would eventually find itself in the middle of the resulting intercontinental controversy.

Argentina based, and continues to base, its Antarctic claims in part upon rights allegedly obtained through the bulls of Pope Alexander VI, which divided the unclaimed territories of the world between Spain and Portugal in 1493, specifically including the Antarctic regions.⁵⁸ Argentina maintains that it succeeded to these rights in 1810 in accordance with the principle of uti posseditis juris, which proposes that all the former colonial holdings of Spain and Portugal in the Western Hemisphere have been occupied de jure by Latin American states since their independence.⁵⁹

Argentina also supports its Antarctic claims on geographic bases. The Falkland and South Shetland Islands, South Georgia, and the Palmer Peninsula constitute an extension of the Andes Mountains; and the South American and Antarctic

⁵⁸See, for example, Papal Bull *Inter Coetera*, March 4, 1493, in Arturo Enrique Sampay, *La Soberanía Argentina sobre la Antártida* (Buenos Aires: Laborenus, 1950), p. 14.

⁵⁹J. Daniel, "Conflict of Sovereignities in the Antarctic," *Yearbook of World Affairs*, Vol. 3 (1949), p. 263.

Continents are thus joined by an 'Antillean Loop.' These territories are therefore a part of the South American continental shelf, and Argentina claims rights to them on this basis. Furthermore, Argentina considers that its proximity to Antarctica and the sub-Antarctic islands affords it rights in the region.⁶⁰

The above arguments appear to be of doubtful validity, but the exact state of international law regarding Antarctic claims is still subject to speculation. No two nations have ever agreed to submit an Antarctic question to adjudication; and as long as this remains the case, Argentina and other claimants can be expected to continue to base their claims on a wide variety of criteria. The value of arguments not related to occupation and administration, however, appears highly dubious.

It is also to be noted that some of the Argentine arguments are mutually contradictory. For example, acceptance of the papal line of demarcation would place the Argentine-claimed islands which lie to the east of the line under Brazilian sovereignty. In addition, the recognition of rights accruing from propinquity would strengthen Argentina's claim against the United Kingdom but weaken that against Chile, which is located nearer to Antarctica and asserted a challenge to a portion of the Argentine claim in 1940.

⁶⁰Christie, Antarctic Problem, pp. 263-264.

In any event, the British Government gave no serious attention to the statements embodied in the Argentine note to the Universal Postal Union, considering them just another manifestation of the Falkland Islands dispute, which had been in existence for almost a century.⁶¹

The dispute between Argentina and the United Kingdom over the Falkland, or Malvinas, Islands dates from the British occupation of these islands in 1833 and, except for its juridical relationship to the Antarctic claims positions of both nations, is beyond the scope of this study. The juridical relationship is based on several factors. First, possession of the Falklands can be used to define or extend sector claims in the Antarctic. Second, as another link in the 'Antillean Loop,' the Falklands are important to the Argentine claim to rights in the Antarctic based on geological affinity and the continental shelf. Finally, if the Falklands should be recognized as Argentine, Argentina might have a strong case against the validity of British acts of occupation and administration carried out in what the British termed dependencies of the Falkland Islands. As one Argentine writer states, "There is no problem in admitting that the Antarctic lands are Falkland Islands' Dependencies, since the Malvinic Archipelago is Argentine."⁶²

⁶¹Christie, Antarctic Problem, p. 246.

⁶²Juan Carlos Moreno, Nuestras Malvinas; La Antartida (Buenos Aires: El Ateneo, 1964), p. 210.

The second nation to assert Antarctic claims in the late 1920's was Norway. Norwegians had dominated the Antarctic whaling industry since 1892 and had been responsible for the innovations which had led to the modernization of that industry in the early 1900's. Norwegian explorers had also been active in the Antarctic, and in 1911 one of these explorers, Roald Amundsen, became the first man to reach the South Pole. A circular area around the pole was claimed for Norway by Amundsen, but this claim has never been asserted by the Norwegian Government. On January 23, 1928, the first official Norwegian claim in the Antarctic, to Bouvet Island in the South Atlantic Ocean, was promulgated by royal decree.⁶³ Some eleven months later, the Norwegian Government informed the United States of its claim;⁶⁴ and no objections to the Norwegian action were raised within the United States Government.

The Norwegian Government also began to fear that the United States might abandon the Hughes Doctrine and assert a claim to Antarctic territory of interest to Norway on the basis of Byrd's flights alone and in April, 1929, made an

⁶³Norwegian-Royal-Decree of January 23, 1928, in Naval War College, Documents, 1948-49, p. 238.

⁶⁴Norwegian Minister in Washington, Halvard H. Bachke, to Secretary of State, December 12, 1928, in U. S., Department of State, "Assertion by Norway to Sovereignty over Bouvet Island and Other Specified Regions in the Antarctic," Foreign Relations of the United States, 1929, Vol. 3, p. 716.

oblique request to the United States for information on its Antarctic policy.⁶⁵ The United States acknowledged the communication from Norway but made no comment on the matter of Antarctic claims.⁶⁶

Although the United States Government was becoming more involved in Antarctic affairs, it had still made no significant attempt to formulate a coherent Antarctic policy. The Antarctic diplomacy conducted by the United States during the late 1920's was tactical at best, consisting of reactions to specific problems as they occurred. Moreover, there was no office or 'desk' within the State Department with the overall responsibility for dealing with situations concerning Antarctica. Whenever such a situation did arise, there was invariably a great deal of activity and memoranda within the State Department as it attempted to discover what, if any, American interests were involved in the case at hand. Since information on Antarctica was virtually non-existent within the United States Government, the State Department invariably took no action. Interest in Antarctica then declined until the occurrence of a new event which seemed to require some action on the part of the United States, at which point the

⁶⁵Norwegian Minister in Washington, Halvard H. Bachke, to Secretary of State, April 15, 1929, in Foreign Relations, 1929, Vol. 3, pp. 717-718.

⁶⁶Foreign Relations, 1929, Vol. 3, pp. 718-719.

entire cycle was repeated. Dissatisfaction with this state of affairs, however, was growing among the American public and within the United States Congress.

United States public interest in Antarctica had increased significantly with the exploits of the Byrd Expedition and the efforts of Admiral Byrd himself toward promoting such interest. This, coupled with a growing concern over the inactivity of the State Department regarding what many believed to be important national interests, led Senator Millard Tydings of Maryland to introduce the following resolution on July 1, 1930:

Whereas hitherto unknown areas of land in the south polar region have been discovered and explored by Rear Admiral Richard E. Byrd; and

Whereas the British Government has notified the Department of State that various areas in the Antarctic, which comprise almost the entire south polar cap, are claimed as British territory; and

Whereas the regions claimed by Great Britain include two areas originally discovered by American naval officers [sic] as early as 1820 and 1840; and

Whereas the Department of State has not defined a policy for the United States regarding American discoveries and explorations in the Antarctic, but has declared that 'in the absence of an act of Congress,' it 'would be reluctant to declare that the United States possessed a right to sovereignty over the territory;' Therefore be it

RESOLVED, That the Senate of the United States does hereby authorize and direct the President to lay claim to all areas in the Antarctic which have been discovered or explored by American citizens.⁶⁷

⁶⁷U. S., Congressional Record, 71st Cong., 1st sess., Vol. 72, pt. II (July 1, 1930), p. 12179.

NOTE--Nathaniel Palmer was a sealer, not a naval officer.

In a speech accompanying the introduction of his resolution, Senator Tydings stated that the United States should act immediately to secure the results of Byrd's work. He discussed the British Antarctic claims and, while he believed that the United Kingdom was entitled to the lands discovered by its nationals, he maintained that the Monroe Doctrine was applicable to Antarctic territories located in the Western Hemisphere. Finally, Tydings discussed what he considered to be the strategic and economic potential of Antarctica and criticized the State Department for its lack of an Antarctic policy.⁶⁸

The Tydings Resolution was immediately tabled and received no further consideration. If the resolution had passed, however, it would have had no force other than as an expression of the wishes of the Senate. While it is debatable whether the power to acquire territory for the United States is possessed by Congress or by the executive, the Senate alone does not have the power either to acquire territory or to "authorize and direct" the President to do so.

Three weeks after its introduction, the Tydings Resolution began to cause reactions within the State Department. The Department's Geographer, Samuel W. Boggs, prepared a memorandum emphasizing the urgent need for serious consider-

⁶⁸U. S., Congressional Record, 71st Cong., 1st sess., Vol. 72, pt. 11 (July 1, 1930), pp. 12179-12180.

ation of the United States position in Antarctica and indicating the lack of such consideration up to that date. Boggs believed that the Tydings Resolution might be passed during the next session of Congress and that it was therefore imperative that the State Department formulate a specific policy with regard to American claims in the Antarctic. In addition, Boggs stated that he had received knowledge the previous May that several whaling companies were being formed in New York and that the question of shore stations would probably arise. This latter information had been sent to the State Department by the Director of the American Geographic Society, Dr. Isaiah Bowman, who had also offered to supply the Department, upon request, with information on United States rights in the Antarctic. Boggs pointed out that this information had not yet been requested from Dr. Bowman.⁶⁹

Boggs further maintained that the State Department would be in no position to formulate an Antarctic policy until it had taken the following steps: (1) conducted a study to determine which nations were entitled to claim which areas of Antarctica, (2) determined, with regard to international law and the Hughes Doctrine, the extent of the effective occupation required in the polar regions, (3) determined the domes-

⁶⁹Memorandum by State Department Geographer, File No. 800.014 Antarctic/28, July 22, 1930, U. S. National Archives, Dept. of State.

tic procedures necessary for the acquisition of Antarctic territory by the United States, and (4) ascertained the attitude of the United States with regard to the use of the sector principle in Antarctica. Boggs added that he knew of no reason for the United States' not asserting Byrd's unofficial claims, especially since these claims did not conflict with those of any other nation.⁷⁰

Boggs concluded his memorandum with the recommendation that the United States should either assert an Antarctic claim or promote some sort of international arrangement, stating with regard to the latter that "there have been suggestions that the policy of land-grabbing should no longer be applied to the Antarctic."⁷¹

The Boggs Memorandum appears to be the first comprehensive statement on the Antarctic political situation prepared by an official of the United States State Department. The basic nature of the steps recommended by Boggs as necessary to the formation of policy again serves to indicate the lack of attention given to Antarctica by the United States Government up to that time. Inasmuch as Geographer Boggs had taken an interest in the affairs of the Antarctic and was the only

⁷⁰Memorandum by State Department Geographer, File No. 800.014 Antarctic/28, July 22, 1930, U. S. National Archives, Dept. of State.

⁷¹Ibid.

State Department official whose position involved contact with the region on a relatively permanent basis, he became the de facto Antarctic 'Desk Officer' and was consulted on virtually all questions relating to the Antarctic that faced the United States Government during the next 10 years.

On August 11, 1930, Boggs embodied his ideas in a memorandum to Acting Secretary of State Wilbur J. Carr. Boggs reiterated the need for an Antarctic policy before Congress convened in September, stressing his belief that there was little reason to expect much objection to the Tydings Resolution.⁷² On September 5, Boggs was authorized to begin work on the necessary studies; and it appeared as if a major step in the formulation of an Antarctic policy had been taken. The State Department scarcely considered the completion of these studies to be a high-priority project, however, as was indicated by Boggs' immediate superior in the following memorandum:

. . . I have asked Mr. Boggs to take hold of the subject and do as much work on it as he can. I think that by dividing the work and using the library staff as much as possible this can be done without additional personnel.⁷³

⁷²Geographer to Acting Secretary of State, File No. 800.014 Antarctic/32, August 11, 1930, U. S. National Archives, Dept. of State.

⁷³Historical Adviser to Under Secretary of State, File No. 800.014 Antarctic/33, September 5, 1930, U. S. National Archives, Dept. of State.

It was soon discovered, however, that congressional interest in Antarctica had been overestimated by Boggs and was insufficient to secure any further action on the Tydings Resolution. In accordance with the above-mentioned cycle of State Department activity regarding Antarctica, Boggs ceased work on his study. Three years passed before the United States Government renewed its concern with Antarctic affairs, and, as in the past, this concern was due to the pressure of external events.

THE ERA OF CONCERN: 1933-1943

Even though the Imperial Conference of 1926 had declared the existence of British titles to Wilkes Land and other unclaimed Antarctic territories, the United Kingdom had taken no immediate action toward formally extending British claims beyond those to the Ross and Falkland Islands Dependencies. On February 7, 1933, however, the following British Order-in-Council was promulgated:

That part of His Majesty's dominions in the Antarctic Seas which comprises all the islands and territories other than Adelie Land which are situated south of the 60th degree of South Latitude and lying between the 160th degree of East Longitude and the 45th degree of East Longitude is hereby placed under the authority of the Commonwealth of Australia.¹

This action by the United Kingdom caused much greater concern in the United States than had any previous territorial claim in Antarctica--for the region defined in the order-in-council included Wilkes Land in its entirety. It appears that the formal British claim to this territory, which had consistently been one of the Antarctic areas of greatest interest to the United States, caused the State Department to realize that if it did not act more decisively to protect American rights in Antarctica, the United States might soon be faced

¹British Order-in-Council of February 7, 1933, in U. S., Naval War College, "Declarations Concerning Antarctic Territories," International Law Documents, 1948-49 (Washington: United States Government Printing Office, 1950), pp. 236-237. Italics mine.

with the fait accompli of the Continent's division among other powers. In addition, the specific exclusion of Adelie Land from the British claim indicated that such powers could be moving toward the formation of a common front of Antarctic claimants.

The new British claim was brought to the attention of the State Department on May 17, 1933, when the Norwegian Minister in Washington delivered a copy of the British Order-in-Council and stated that his government was considering the matter and would appreciate any information on the attitude of the United States.² The Assistant Chief of the State Department's Division of Western European Affairs, J. D. Hickerson, then asked Geographer Boggs to determine whether the British claim conflicted with any claims that the United States might assert.³

With this revival of concern over American rights in the Antarctic, Boggs completed the study that he had commenced three years before and sent it to Hickerson.⁴ On the basis of Boggs' work, Hickerson believed that the United States was in a position to assert a claim to Wilkes Land,

²Memorandum by Hickerson of Conversation with Norwegian Minister Halvard H. Bachke, File No. 847.014/9, May 19, 1933, U. S. National Archives, Dept. of State.

³Hickerson to Boggs, undated, attached to Ibid.

⁴Boggs to Hickerson, File No. 800.014 Antarctic/37 1/4, September 21, 1933, U. S. National Archives, Dept. of State.

and he suggested to Under Secretary William Phillips that a reservation of United States rights in the region be communicated to the British Government. Hickerson also recommended to the Under Secretary that a study be conducted with a view toward formulating a policy with regard to territorial claims in the polar regions. Hickerson admitted that the British claim to Wilkes Land was the only problem demanding immediate attention but expressed the belief that the study should involve the entire Antarctic claims situation.⁵ No immediate action was taken on any of Hickerson's recommendations, but it became apparent during the next few months that the State Department had begun to shift to a more active policy regarding the protection of American interests in the Antarctic.

Of considerable importance to this shift in policy were the activities of Admiral Byrd and the close friendship that existed between Byrd and the recently-inaugurated President, Franklin D. Roosevelt. In 1933, Byrd was engaged in active preparations for a second expedition to Marie Byrd Land; and although the Depression caused him to encounter greater difficulties in raising funds than he had faced in 1928, he was again successful in obtaining the necessary money and

⁵Hickerson to Under Secretary of State, File No. 800.014 Antarctic/ 37 3/4, October 5, 1933, U. S. National Archives, Dept. of State.

equipment, with much of the latter on loan from various private institutions and government agencies.⁶ On September 7, 1933, the President sent Byrd the following 'bon voyage' letter, which indicated both the extent of their friendship and the high level of interest and knowledge regarding the Antarctic possessed by the White House at that time:

My Dear Dick:

I am delighted that you have had the faith to go ahead with this scientific expedition to the Antarctic Continent and that you have definitely set the date of departure for September 25th.

It is because you and I are such old friends, and because I have followed so closely your three previous expeditions [two of which were to the Arctic], that I expect to keep in close touch with your new expedition.

I realize the importance of your excellent preparations for scientific discovery and the fact that you will make a detailed survey of a large area of a new continent previously unexplored. . . .

I am especially interested in the exhaustive study of weather on the Antarctic Continent--a territory in the clutches of the ice age, and a weather maker for the greater part of the South American Continent. Your weather observations will undoubtedly be of great importance to South America and to the scientific knowledge of world weather conditions.⁷

President Roosevelt further stated that the Byrd Expedi-

⁶Walter G. Sullivan, Quest for a Continent (New York: McGraw-Hill, c. 1957), p. 89.

⁷President to Byrd, September 7, 1933, in Samuel Rosenman, ed., The Years of Crisis (Vol. 2, The Public Papers and Addresses of Franklin D. Roosevelt, Samuel Rosenman, ed., 5 vols., New York: Random House, 1958), pp. 354-355.

tion had "the full support of the United States Government" and that Byrd could "call on the Government in case of need or emergency."⁸

Byrd arrived in Antarctica in January, 1934, and again established his expedition at Little America in New Zealand's Ross Dependency. As had been the case five years earlier, New Zealand was concerned that Byrd's activities might be used by the United States as bases for challenging its Antarctic claim; and this concern was communicated to the United States Government on January 29, 1934, in a strongly-worded note signed by the British Ambassador in Washington. It was stated in the note that the New Zealand Government was under the impression that the Byrd Expedition was being conducted under official auspices, inasmuch as a postmaster had been commissioned to operate a United States Post Office at Little America and special United States postage stamps had been issued for use at the American base. The United States was informed that the New Zealand Government recognized the necessity for making allowances for the lack of regular postal facilities in the Ross Dependency but would regard the provision of these facilities without permission from the "sovereign power" as "infringing the British sovereignty and New Zealand administrative rights in the dependency as well as

⁸President to Byrd, September 7, 1933, in Rosenman, ed., *The Years of Crisis*, p. 355.

the laws there in force."⁹

The United States was further informed that the New Zealand Government understood that Byrd was operating a wireless station and flying aircraft in the area without having requested permission for these activities. The previous offer to grant such permission was still valid, but the New Zealand Government "would have preferred prior application."¹⁰ Finally, the hope was expressed that the United States Government would keep the above points in mind with regard to any future Antarctic expeditions under official auspices.

The United States replied to the British Ambassador's note on February 7, in a note signed by an Assistant Secretary of State:

I desire to assure you that any facilities given to the expedition by the New Zealand authorities are greatly appreciated. It does not seem necessary at this time to enter into a discussion of the interesting questions which are set forth in your note. However, I reserve all rights which the United States or its citizens may have with respect to this matter.¹¹

⁹British Ambassador in Washington, Sir Ronald Lindsay, to Secretary of State, January 29, 1934, in Green H. Hackworth, Digest of International Law (8 vols., Washington: United States Government Printing Office, 1940), Vol. 1, p. 456.

¹⁰Ibid., Vol. 1, pp. 456-457.

¹¹Assistant Secretary of State R. Walton Moore to British Ambassador in Washington, February 24, 1934, in Hackworth, Digest, Vol. 1, p. 457.

The reservation of United States rights in the above note constituted a milestone in United States Antarctic diplomacy and appears to be the result of the concern with Antarctica that had been increasing within the State Department since the promulgation of the British claim to Wilkes Land. This was the first time that the United States had communicated the existence of American rights in Antarctica to a foreign power--a marked change over the simple acknowledgments of receipt that had characterized past correspondence. From this point, virtually all replies to communications regarding Antarctic claims from other governments included similar reservations of United States rights in the region of Antarctica concerned.

Nine months later, Secretary of State Hull attempted to alleviate the fears of the New Zealand Government by sending an 'informal note' to the British Ambassador, in which he stated that the only activity of the United States Government relative to the Byrd Expedition had been the provision of postal services.¹² In his reply, the British Ambassador indicated that New Zealand had retreated somewhat from its earlier position. It was now stated that the Government of New Zealand had no objection to the United States postal services in the Ross Dependency but would have protested if the

¹²Secretary of State to British Ambassador in Washington, November 14, 1934, in Hackworth, Digest, Vol. 1, p. 457.

provision of these services had "appeared to them to be designed as an assertion of United States sovereignty over any part of the Ross Dependency or as a challenge to British sovereignty therein."¹³ The United States replied to this note with another reservation of American rights in the area.¹⁴

While the Byrd Expedition was engaged in exploring the eastern region of the unclaimed sector lying between 80° West and 150° West, another American, Lincoln Ellsworth, was conducting flight operations to the west. In 1925, Ellsworth had accompanied Roald Amundsen in the latter's unsuccessful attempt to reach the North Pole by air; and eight years later, Ellsworth made his first attempt to fly across the Antarctic Continent. Establishing his privately-financed expedition at the Bay of Whales, he made his first test flight on January 11, 1934. A few days afterward, however, his plane became damaged in a storm, and he was forced to take it to New Zealand for repairs. Ellsworth left the Bay of Whales just four days before Byrd's arrival.¹⁵

Ellsworth returned to Antarctica in the next austral summer but was unable to obtain proper flying conditions.

—¹³British Ambassador in Washington to Secretary of State, December 27, 1934, in Hackworth, Digest, Vol. 1, p. 458.

¹⁴Secretary of State to British Ambassador in Washington, February 7, 1935, in Ibid., Vol. 1, pp. 458-459.

¹⁵Sullivan, Quest, p. 101.

In October, 1935, he arrived in Antarctica a third time and decided to make his attempt from Dundee Island, off the northern tip of the Palmer Peninsula. Ellsworth took off on November 11 and headed down the Peninsula, dropping an American flag when he crossed 80° West, the limit of the British claim. Forced to land temporarily by bad weather, he raised another American flag and claimed the territory between 80° West and 120° West for the United States. This sector lay between Marie Byrd Land and the Falkland Island Dependencies, and Ellsworth's act thereby extended unofficial United States claims to include the entire region between the British and New Zealand sectors.¹⁶ Continuing his flight, Ellsworth finally ran out of fuel some 12 miles from the Bay of Whales, which he managed to reach after 12 days on foot. He attempted to cross the continent again during the 1937-1938 season, but he was again unsuccessful.

Meanwhile, the Second Byrd Expedition was achieving remarkable successes in its program of explorations and scientific studies, which included the establishment of the first scientific station in the interior of the continent. Byrd returned to the United States in 1935; and, as had occurred in 1930, the publicity accompanying his Expedition had caused an increase in public awareness of the Antarctic. In addition,

¹⁶Sullivan, *Quest*, pp. 101-104.

the work of the Second Byrd Expedition had generated a greater interest in Antarctic research within the scientific community and had demonstrated to policy makers and strategists the feasibility of sustained operations on the Antarctic Continent.¹⁷

The United States continued to maintain the diplomatic position regarding Antarctica that it had adopted in 1934; and to the numerous inquiries received from citizens concerned with American claims in the Antarctic, the State Department replied that although it was not in a position to comment on the matter of Antarctic claims, it had nevertheless communicated formal reservations of American rights in Antarctica to foreign governments.¹⁸ Regardless of the position taken by the State Department in its communications, the United States Government had still made no efforts toward determining the exact nature of American interests in Antarctica or toward formulating a coherent policy to protect those interests if they in fact existed. Within three years after the return of the Second Byrd Expedition, however, various factors caused official interest in the Antarctic to increase

¹⁷Charles E. Dewing and Laura E. Kelsay, compilers, "Records of the United States Antarctic Service," Preliminary Inventories of the United States National Archives, No. 90 (1955), p. 1.

¹⁸See, for example, Assistant Secretary of State R. Walton Moore to Miss Florence Holland, File No. 800.014 Antarctic/101, June 8, 1936, U. S. National Archives, Dept. of State.

to the point where President Roosevelt requested that such efforts be made.

The first such factor was the growing concern of the United States War and Navy Departments over the strategic implications of polar aviation, the feasibility of which had been demonstrated by Byrd and other explorers in both the Arctic and Antarctica.¹⁹ The second factor was related to conditions in the whaling industry. In 1931, after it had become apparent that stocks of whales were rapidly diminishing, the Convention for the Regulation of Whaling had been signed in Geneva. This agreement had failed to secure the necessary controls, however, and another whaling conference was called by the United Kingdom, to meet in London in early 1937. This caused the State Department to become involved with the problems of Antarctic whaling in general and the question of whaling stations on the Antarctic Continent. The resulting International Agreement for the Regulation of Whaling was signed on June 6, 1937, but was only to remain in force for one year; and the State Department therefore found it necessary to maintain a continuing interest in the

¹⁹Much valuable information concerning this period of United States involvement with the Antarctic was gained through conversations with Ambassador Hugh S. Cumming, former member of the Executive Committee of the United States Antarctic Service.

matter.²⁰

This increased military and political involvement with the polar regions had the effect of indicating a need for coherent United States policies with regard to both the Arctic and Antarctica, and in the spring of 1938 President Roosevelt directed the State Department to conduct a study on the manner in which the United States might protect such territorial rights as it possessed in these regions.²¹ Hugh S. Cumming, then an officer in the State Department's Office of European Affairs, was placed in charge of the project. Even before Cumming's study was completed, however, there were indications that the United States had decided to pursue a more active policy in the matter of Antarctic claims.

Lincoln Ellsworth was planning to make a fourth attempt to cross Antarctica by air during the 1938-1939 season; and in June, 1938, Ellsworth's brother-in-law, Joseph Ulmer, informed the State Department that Ellsworth was interested in claiming Antarctic territory for the United States. Ulmer

²⁰Shigeru Oda, International Control of Sea Resources (Leyden, the Netherlands: A. W. Sythoff, 1963), pp. 78-79.

NOTE--The International Agreement for the Regulation of Whaling was subsequently extended by the London Protocol of June 24, 1938. By the end of 1939, Antarctic whaling operations had been virtually suspended by the war. Ibid., p. 79.

²¹Acting Secretary of State Sumner Welles to President, File No. 800.014 Antarctic/129A, January 6, 1939, U. S. National Archives, Dept. of State.

also indicated that Ellsworth would probably be willing to base his plans for exploration on any suggestions from the Department regarding which regions of Antarctica the United States would be most interested in claiming. At that time, Ulmer was informed that the Department could not make suggestions of that nature to a private expedition.²² Two months later, however, while the Ellsworth Expedition was en route to Capetown, Secretary Hull sent the following instructions to the American Consul in that city:

Upon the arrival of Mr. Ellsworth in Capetown you are requested to inform him, in strict confidence, that it seems appropriate for him to assert claims in the name of the United States as an American citizen, to all territory he may explore, photograph, or map which has hitherto been undiscovered and unexplored, regardless of whether or not it lies in a sector or sphere of influence already claimed by another country.²³

Secretary Hull then listed specific procedures, such as dropping notes and proclamations by parachute, that Ellsworth might use to make such claims and further instructed the American Consul to insure that the Department's interest in the matter of Antarctic claims be kept confidential.

²²Secretary of State to Consul at Capetown, James O. Denby, August 30, 1938, in U. S., Department of State, "Assertion by Lincoln Ellsworth of Claim to Territory in Antarctica for the United States," Foreign Relations of the United States, 1938 (Washington: United States Government Printing Office, 1955), Vol. 1, p. 972.

²³*Ibid.*, Vol. 1, p. 972. Italics mine.

After receiving Hull's suggestions, Ellsworth requested a copy of the original message to the American Consul in Capetown and more specific guidance in his proposed claims activity. These requests were relayed to Washington by the American Consul, and they both were refused by Secretary Hull. The State Department was unwilling to risk the possibility of the instructions' being seen by foreign nationals and was reluctant to suggest that Ellsworth claim specific Antarctic territories. The American Consul was authorized, however, to impart to Ellsworth under the heading of "general guidance" the following information, which was apparently the very information that Ellsworth was seeking:

The extent of American activities in Wilkes Land, Palmer or Graham Land, Marie Byrd Land and Heard Island, and other areas in the Antarctic are of course well known to Ellsworth. The United States has never recognized the "sector principle" nor has it formally recognized any claims in the Antarctic asserted by other Governments.²⁴

Ellsworth reached Antarctica too late in the season to attempt the transcontinental flight, but on January 11, 1939, he flew some 250 miles inland from the coast of the Australian claim. As he crossed latitude 70° South, Ellsworth dropped a copper cylinder, in which he had placed an American flag and a statement claiming for the United States the territory

²⁴Secretary of State to Consul at Capetown, October 22, 1938, in Foreign Relations, 1938, Vol. 1, p. 974.

within 150 miles of his flight path, between latitudes 70° South and 72° South. This region, directly to the west of Wilkes Land, comprises approximately 77,000 square miles and has become known as the American Highland. Since all claims based on the sector principle extend from the coast to the Pole, Ellsworth's claim to a hinterland area thus served to lessen the possibility of the principle's becoming accepted as the standard practice of nations. Ellsworth reported his claims activities, along with his failure to reach Heard Island due to unfavorable weather conditions, to the American Consul General in Sydney, Australia, who sent the information to Washington.²⁵

It was apparent that the United States Government had decided to take action toward strengthening the American position in the Antarctic; but even though Hull's suggestions to Ellsworth indicated that the assertion of United States claims was being considered, the exact nature and goals of policy had not yet been determined, and it was not desired that relations with the claimant nations be complicated until such time as the United States did decide upon a specific Antarctic policy.

While the State Department was engaged in its policy study, there occurred new events which made the protection

²⁵Consul General at Sydney, Thomas M. Wilson, to Secretary of State, February 22, 1939, in Foreign Relations, 1938, Vol. 1, p. 975.

of American interests in Antarctica appear even more vital than before. On March 5, 1938, France had proposed to the United Kingdom that reciprocal rights of free passage over French and British Commonwealth territories in the Antarctic be granted to each other's aircraft.²⁶ To facilitate such an agreement, France finally delimited its claim to Adelie Land, by means of a Presidential Decree which proclaimed the existence of French sovereignty over the islands and territories located between 136° East and 142° East, south of 60° South.²⁷

The French proposal was accepted by the Governments of the United Kingdom, Australia, and New Zealand; and the aircraft agreement entered into force on October 25.²⁸ With the current American interest in polar aviation, the United States informed the Contracting Powers that it reserved all its rights with respect to matters involving aviation in the Antarctic and to the questions of territorial sovereignty

²⁶League of Nations, "Exchange of Notes Between His Majesty's Governments in the United Kingdom, in the Commonwealth of Australia and in New Zealand and the Government of the French Republic Constituting an Agreement Regarding the Free Right of Passage to Aircraft over British and French Territories in the Antarctic. Paris, October 25th, 1938," League of Nations Treaty Series, Vol. 192 (1938), pp. 324-325.

²⁷French Presidential Decree of April 1, 1938, in Naval War College, Documents, 1948-49, pp. 230-231.

²⁸"Exchange of Notes . . . October 25th, 1938," League of Nations Treaty Series, Vol. 192, p. 325.

implicit in such matters.²⁹

Also during the latter half of 1938, there occurred another external event, which greatly increased the probability that the United States would soon become committed to active measures in defense of its rights in the Antarctic. This event was the penetration of Antarctica by the German Reich.

Germany had not been active in the Antarctic since the early years of the twentieth century before World War I, but the Nazi Government had become interested in Antarctic whaling as a possible solution to the German shortage of animal fats. A German whaling fleet was organized in 1936 and planning was commenced on an exploring expedition to Antarctica. The mission of the latter would be to continue the scientific work of the pre-war German expeditions and to establish bases for German Antarctic claims in order to insure a continued German participation in Antarctic whaling in spite of the claims of other powers.³⁰

The German Antarctic Expedition departed from Hamburg aboard the catapult ship Schwabenland on December 22, 1938.³¹

²⁹Acting Secretary of State Sumner Welles to Charge in the United Kingdom, H. V. Johnson, January 6, 1939, in U. S., Department of State, "Reservation of Rights of the United States with respect to Claims of Other Nations to Sovereignty in the Antarctic," Foreign Relations of the United States, 1939 (Washington: United States Government Printing Office, 1956), Vol. 2, p. 1.

³⁰Sullivan, Quest, p. 124.

³¹The New York Times, December 23, 1938, p. 39.

At that time there were only two areas of the Antarctic Continent which had not been formally claimed. These bordered the British Falkland Islands Dependencies on the west and east respectively; the first had been claimed unofficially for the United States by Byrd and Ellsworth, and the second, now called Queen Maud Land, had been partially explored by Norwegians. The Germans chose to operate in the latter, intending to conduct an extensive program of aerial exploration and mapping during the first season and to return in greater force the following year.

The German explorations were conducted by the Schwabenland's two seaplanes. To establish bases for a future German assertion of rights in the region, markers were dropped every fifteen to twenty miles and four landings were made near the coast, at which points members of the expedition raised swastikas and claimed the territory for Germany.³²

Hitler was greatly pleased with the results of the expedition, but the German Government made no efforts toward formally asserting Antarctic claims. In the absence of such formal assertion, claims made by members of expeditions, regardless of whether or not the expeditions themselves are under official auspices, have little value in the custom of nations other than as bases for future official action. For a nation's sovereignty to be considered to exist over certain

³²Sullivan, Quest, pp. 125-127.

territory, the nation concerned must first indicate its desire and intention to act as sovereign and engage in some exercise of sovereign rights in that territory.³³ Like the United States, Germany never took such action; and, in any event, World War II soon caused the German Government to cancel its plans for further Antarctic exploration.

As a result of the German Expedition, Norway became concerned over possible German encroachments upon Norwegian whaling interests in the Antarctic;³⁴ and five days before the first exploratory flight from the Schwabenland, a Norwegian Royal Proclamation was issued, which claimed for Norway the Antarctic coast between the British and Australian claims.³⁵ The Norwegian claim, however, did not extend to the Pole because Norway rejected the sector principle, and the southern boundary of this claim has never been delimited. Upon being informed of the Norwegian claim,³⁶ the United

³³See, for example, Permanent Court of International Justice, Legal Status of Eastern Greenland, Judgment of April 5, 1933, Series A/B, No. 53, p. 46.

³⁴Recommendation of the Norwegian Ministry of Foreign Affairs, January 14, 1939, in Naval War College, Documents, 1948-49, pp. 240-242.

³⁵Norwegian Royal Proclamation, January 14, 1939, in Ibid., p. 243.

³⁶Norwegian Minister in Washington, Wilhelm Morgenstierne, to Secretary of State, January 14, 1939, in "Reservation of Rights," Foreign Relations, 1939, p. 2.

States reserved all American rights in the area.³⁷

The Norwegian claim, in addition, had a direct effect on the Antarctic policy of Chile, which had maintained an official interest in Antarctica for over a century but had never asserted a territorial claim. In February, 1939, the Chilean Government responded to the Norwegian claim, which involved territory directly to the east of the regions of greatest interest to Chile, with a reservation of Chilean rights in the area. Eight months later, the Chilean Government appointed a special commission to conduct a study of Chilean rights and interests in the Antarctic. This study was completed in 1940 and led to the formal proclamation of a Chilean Antarctic claim.³⁸

Meanwhile, Hugh S. Cumming's study on United States Antarctic policy had been completed, and the State Department submitted a report on its results to President Roosevelt on January 6, 1939. On the basis of the study, which had relied heavily on Geographer Boggs' previous work, the State Department believed that serious consideration should be given to measures that the United States could take to assert territorial claims in both polar regions. The report

³⁷Counselor of the Department of State, R. Walton Moore, to Norwegian Minister in Washington, January 16, 1939, in "Reservation of Rights," *Foreign Relations*, 1939, pp. 2-3.

³⁸E. W. Hunter Christie, *The Antarctic Problem* (London: Allen and Unwin, 1951), p. 281.

stated that this belief was based on the following factors: (1) the feasibility of polar aviation, (2) American interests in the strategic and economic implications of the polar regions, (3) the measures taken by various nations toward cementing their polar claims, and (4) recent indications of German and Japanese interest in any American claims activity in Antarctica.³⁹

The report further stated that the Hughes Doctrine failed to give the proper consideration to climatic conditions and over-emphasized the occupation required for a valid claim to territorial sovereignty in the polar regions, and the State Department recommended to the President that the United States modify its position on effective occupation as necessary to assert American claims in the Antarctic. The Department also recommended that the United States determine the regions of Antarctica in which it possessed rights to sovereignty and assume the position that prior claims based on the sector principle were without validity in international law. Finally, the State Department proposed that it begin joint planning on Antarctica with the War, Navy, and Interior De-

³⁹Acting Secretary of State Sumner Welles to President, File No. 800.014 Antarctic/129A, January 6, 1939, U. S. National Archives, Dept. of State.

NOTE--The only Japanese expedition to Antarctica up to this date had been that of 1910 under private auspices. Although Japan was involved in Antarctic whaling and maintained an official interest in Antarctica, it had asserted no territorial claims.

partments and the Coast Guard and expressed the belief that the United States should prepare to place any areas claimed in the Antarctic under some branch of the government for administrative purposes.⁴⁰

President Roosevelt approved the State Department's recommendations, and an interdepartmental committee was formed to plan, in consultation with Byrd and Ellsworth, the specific activities to be undertaken in Antarctica. Roosevelt believed that it might be possible to obtain congressional appropriations for two Antarctic expeditions each year, and he envisaged the establishment of American settlements at Little America and in the region to the south of Africa which was currently the focus of German operations.⁴¹ Roosevelt initially intended for these settlements to be evacuated prior to the onset of the Antarctic winter each year but approved a subsequent recommendation by Secretary Hull that they be occupied on a year-round basis. Hull believed that this would both strengthen United States rights and increase the rewards from scientific investigation in the Antarctic.⁴²

⁴⁰Acting Secretary of State Sumner Welles to President, File No. 800.014 Antarctic/129A, January 6, 1939, U. S. National Archives, Dept. of State.

⁴¹President to Acting Secretary of State Sumner Welles, File No. 800.014 Antarctic/135, January 7, 1939, U. S. National Archives, Dept. of State.

⁴²Cordell Hull, The Memoirs of Cordell Hull (2 vols., New York: The Macmillan Company, 1948), Vol. 1, pp. 758-759.

With regard to the location of the proposed settlements, differences of opinion soon developed among the members of the interdepartmental committee. Admiral Byrd and the Interior Department desired that the United States establish four Antarctic stations; one at Little America, one on the Palmer Peninsula, and two on territory claimed by Australia.⁴³ In contrast, the State Department believed that the United States should concentrate its efforts in the unclaimed sector, which had been explored and unofficially claimed for the United States by Byrd and Ellsworth.⁴⁴ Even though the State Department maintained that the United States should take steps toward protecting American rights in the Antarctic, it was somewhat reluctant to see the United States committed to activities which could be construed as direct challenges to the Antarctic claims of other nations until the value of Antarctica to the United States could be more precisely determined. This was particularly true in the case of the Palmer Peninsula, where Argentina and Chile claimed rights. For over a decade, the State Department had been attempting to construct a system of solidarity among the American Republics, and this goal appeared especially impor-

⁴³Assistant Chief, Division of European Affairs, State Department, to Chief, Division of European Affairs, File No. 800.014 Antarctic/176, March 6, 1939, U. S. National Archives, Dept. of State.

⁴⁴Hull, Memoirs, Vol. 1, pp. 758-759.

tant in view of deteriorating conditions in Europe and Asia. Any claims-strengthening activity on the part of the United States in the Antarctic regions of interest to Argentina and Chile could easily evoke new Latin American charges of 'American Imperialism,' and this the Department desired strongly to avoid.

Further complicating the work of the interdepartmental committee was the fact that until the geographic focus of American operations could be determined, there could be no final decision as to whether the United States should continue to follow the lines of the Hughes Doctrine or accept a less rigorous definition of effective occupation. If the United States were to confine its activities and possible future claims to the unclaimed sector, there would no longer be any necessity to follow Hughes' stringent criteria. The Hughes Doctrine, by demanding permanent settlement as a basis for a territorial claim, would become in fact a liability, making the establishment of a United States claim a more complicated and more costly project. Conversely, however, to abandon the Doctrine and assert a claim on the basis of short-term occupation would be to make it more difficult for the United States to contest the validity of the Antarctic claims of other nations.

Although it was unable to reach an immediate decision on either the geographic focus or the exact nature of the activities to be conducted by the United States in Antarc-

tica, the interdepartmental committee believed that the German operations made it imperative that the American expedition reach Antarctica that year. President Roosevelt agreed and in May, 1939, wrote the Speaker of the House of Representatives, requesting an appropriation of \$340,000 to provide for the expedition's expenses.⁴⁵ The President had decided that any permanent American settlements in Antarctica would be administered by the Interior Department's Division of Territories and Island Possessions, and the appropriation was therefore requested for that agency. The request was considered in hearings by the Subcommittee on Deficiencies of the House Appropriations Committee.

Testifying before the subcommittee were the Director of the Interior Department's Division of Territories and Island Possessions, Dr. Ernest Gruening, Rear Admiral Byrd, and Lewis Clark of the State Department. Opening testimony was presented by Dr. Gruening, who stated that the main purpose of the proposed expedition would be to strengthen the bases of United States claims in the Antarctic and that the Antarctic operations of other nations made it necessary for the American expedition to be mounted immediately.⁴⁶

⁴⁵U. S., Congress, House of Representatives, Committee on Appropriations, Subcommittee on Deficiencies, Hearings on the Expedition to the Antarctic Regions, 76th Cong., 1st sess., June 2, 1939 (Washington: United States Government Printing Office, 1939), p. 1.

⁴⁶Ibid., p. 6.

In his testimony, Admiral Byrd spoke in favor of permanent American settlements in Antarctica coupled with the formal assertion of United States territorial claims. He criticized the United States Government for failing to claim certain areas of Greenland that had been explored by Americans and compared the case of Antarctica with those of various Pacific islands, stating that many of these islands should belong to the United States by right of discovery but have been occupied by nations with more foresight than the United States. Byrd also painted a glowing picture for the subcommittee of the economic value of the Antarctic, particularly with regard to coal deposits which he had discovered; and of especial interest was the following interchange with Representative Louis Ludlow of Indiana:

MR. LUDLOW: Would it be practicable to bring coal out from that area?

ADM. BYRD: Yes, if we should need it.

MR. LUDLOW: You could develop transportation facilities for marketing the coal?

ADM. BYRD: Yes.⁴⁷

There is, of course, no doubt that the United States could extract and market Antarctic coal if it were necessary for some reason to do so; but the costs involved have precluded such action even up to 1969. Admiral Byrd was

⁴⁷House Appropriations Committee, Subcommittee on Deficiencies, Expedition, p. 13.

apparently attempting to tell the subcommittee what he thought it wanted to hear and, in the process, made other statements which were somewhat misleading. For example, he discussed the early explorations of Palmer and Wilkes, the strategic importance of the Palmer Peninsula, and the value of a United States naval base in the Antarctic, further maintaining that not only the Palmer Peninsula but also "most of Antarctica that lies within the Western Hemisphere" should fall within the scope of the Monroe Doctrine.⁴⁸ In subsequent testimony, however, Byrd stated that he did not desire any international controversy and recommended perfecting a United States claim to only "that area where we alone have established rights."⁴⁹ When asked by Representative William P. Lambertson of Kansas if such a claim would require naval defense against other powers, Byrd replied that he could envision no dispute if the United States firmly established itself in the area before any other nation did so.

In the latter statement, Byrd was apparently referring to the unclaimed sector that he and Ellsworth had explored; and it is true that a United States claim to that region would probably not have been contested directly. But Byrd had spoken above of the strategic value of the Palmer

⁴⁸House Appropriations Committee, Subcommittee on Deficiencies, Expedition, p. 12.

⁴⁹Ibid., p. 13.

Peninsula and of the territory explored by Wilkes; and any claim to these areas would, of course, involve a direct confrontation with other claimant nations, as would invoking the Monroe Doctrine over "most of Antarctica that lies within the Western Hemisphere." The fact was that the unclaimed sector, the region to which the United States possessed the strongest bases for a claim, was one of the least accessible and least valuable areas of the continent--which was precisely one of the reasons why it had not heretofore been claimed by another nation. Thus when Byrd discussed the value of Antarctica to the United States, he referred to regions other than the unclaimed sector; and when he belittled the possibility of international repercussions to a United States claim, he referred to that sector alone. This distinction apparently went unnoticed by the subcommittee.

The representative of the State Department at the Hearings, Lewis Clark, was also asked if he foresaw a likelihood of international disputes arising from the proposed American activities in Antarctica. He replied that he expected no serious disputes but that if the United States did not take immediate action, it might be confronted with a foreign claim to the region explored by Admiral Byrd.⁵⁰ This statement further indicated that the State Department was thinking

⁵⁰House Appropriations Committee, Subcommittee on Deficiencies, Expedition, p. 8.

primarily of the unclaimed sector, in which area American activities would be less likely to cause the international disputes which the Department wished to avoid.

The subcommittee was particularly concerned with the duration of the United States effort in the Antarctic, inasmuch as Congress would be called upon to finance the various annual programs. When questioned on this matter, Dr. Gruening replied that he thought the duration of the effort depended on whether or not the State Department decided that permanent occupation was necessary to the establishment of a valid territorial claim. Lewis Clark admitted that the State Department had as yet made no final decision in the matter but informed the subcommittee that there was a possibility that the United States might recede from Secretary Hughes' rigorous definition of effective occupation, thus enabling the United States to assert a territorial claim on the basis of limited activities.⁵¹

In any event, Congress provided the funds for the expedition through the passage of the Urgent Deficiency and Supplemental Appropriation Act of 1939 on June 30.⁵² President Roosevelt then moved quickly to formalize the administrative arrangements for planning the forthcoming expedition

⁵¹House Appropriations Committee, Subcommittee on Deficiencies, Expedition, p. 8.

⁵²U. S., Statutes at Large, Vol. 53 (1939), p. 986.

and directing United States Antarctic policy as a whole. He requested that the Secretaries of State, the Treasury, the Navy, and the Interior each designate a permanent representative to a new interdepartmental committee, which would have the responsibility for "organizing, directing, and coordinating" the activities to be conducted in the Antarctic.⁵³ The respective designees to the committee were Hugh S. Cumming, Rear Admiral Russell R. Waesche, United States Coast Guard, Captain Charles C. Hartigan, United States Navy, and Dr. Gruening.

Roosevelt offered the command of the expedition to Admiral Byrd, and the latter promptly accepted. On July 12, Roosevelt sent the Admiral a letter in which he expressed his appreciation of Byrd's acceptance and the following ideas on the mission of the expedition:

The most important thing is to prove (a) that human beings can permanently occupy a portion of the Continent winter and summer (b) that it is well worth a small annual appropriation to maintain such permanent bases because of their growing value for four purposes--national defense of the Western Hemisphere, radio, meteorology and minerals. Each of these four is of approximately equal importance as

⁵³President to Secretary of State, July 13, 1939, in U. S., Department of State, "Establishment of the United States Antarctic Service for Exploration and Scientific Studies," Foreign Relations of the United States, 1939 (Washington: United States Government Printing Office, 1956), Vol. 2, p. 7.

far as we now know.⁵⁴

There was never any doubt that Byrd would be designated the leader of the expedition. Before it had become apparent that an official expedition would be mounted, Byrd had begun planning a third Antarctic expedition under private auspices. He had been involved at all stages of the preliminary planning for the official expedition and, in cooperation with the interdepartmental committee, had commenced active preparations as early as the preceding January. Such steps had included the recruitment of personnel around a nucleus of members of his two previous expeditions and the procurement of supplies. After the assurance of funds from Congress, Byrd established a headquarters and supply depot at the Navy Yard in Boston.⁵⁵ Moreover, irrespective of the friendship that existed between the two men, the President recognized Byrd's ability to convince others of the importance of Antarctica to the United States; and Roosevelt concluded his letter by stating that if Antarctica were to be occupied permanently by the United States, Byrd should be prepared to return in the spring of 1940 and explain the reasons for the continued American presence to Congress and

⁵⁴Roosevelt to Byrd, July 12, 1939, in Elliott Roosevelt, ed., *F. D. R., His Personal Letters* (4 vols., New York: Duell, Sloan and Pearce, c. 1950), Vol. 2, p. 906.

⁵⁵Dewing and Kelsay, "Records of the United States Antarctic Service," pp. 1-3.

the American public.⁵⁶

In his letter to Byrd, Roosevelt indicated that he had decided in favor of a permanent American effort in the Antarctic. Six days later, the President directed that the American activities in the region be known as 'The United States Antarctic Service' rather than as merely an American 'expedition.' Roosevelt believed that the use of the latter term would imply that American interest in the Antarctic was only temporary.⁵⁷

Also during the latter half of July, 1939, it was decided by Roosevelt and the interdepartmental committee that the United States should concentrate its efforts in the unclaimed sector of Antarctica, where the bases of American claims were already the strongest, but should give some attention to strengthening American rights in the Palmer Peninsula region, where any activities on the part of a hostile power would pose the greatest threat to the nations of the Western Hemisphere. The President was aware, however, that the conduct of operations in the latter region could well cause harmful repercussions to United States relations with Latin America; and he directed the State Department on July 28

⁵⁶Roosevelt to Byrd, July 12, 1939, in Elliott Roosevelt, ed., *F. D. R., His Personal Letters*, Vol. 2, pp. 906-907.

⁵⁷Memorandum by Hugh S. Cumming, July 18, 1939, in "Establishment of the United States Antarctic Service," *Foreign Relations*, 1939, Vol. 2, pp. 7-8.

to inform Argentina, the only Latin American nation claiming sovereignty in the region, that the primary objective of the United States expedition would be to protect the rights of all American republics.⁵⁸

President Roosevelt believed at that time than any Antarctic claims disputes that might arise between nations of the Western Hemisphere could be settled in a spirit of mutual good faith.⁵⁹ He continued to give attention, however, to the relationship between future United States claims and Latin American interests, sending the following memorandum to Under Secretary of State Sumner Welles on August 5:

I am inclined to think in regard to the Antarctic Expedition that we should give some study to a new form of sovereignty, i. e., a claim to sovereignty of the whole sector lying south of the Americas in behalf of, and in trust for, the American Republics as a whole. Under this the United States, being the only Republic which has taken the initiative in exploring and possibly settling the area, would act not only in behalf of its own exclusive sovereignty but would include all the other Republics--and in the future if the American sector proved valuable in any shape, manner, or form, its sovereignty could be managed by an inter-American Republic governing body.

That is a new one. Think it over.⁶⁰

⁵⁸President to Secretary of State and to Under Secretary of State, File No. 800.014 Antarctic/217, July 28, 1939, U. S. National Archives, Dept. of State.

⁵⁹Ibid.

⁶⁰Roosevelt to Under Secretary of State, August 5, 1939, in Elliott Roosevelt, ed., F. D. R., His Personal Letters, Vol. 2, p. 909.

The concluding statement of the memorandum indicated that the idea of 'inter-Americanizing' the "American sector" was entirely that of Roosevelt and was not based upon recommendations from other sources. During the next 18 months the State Department attempted to obtain the agreement of Argentina and Chile to a conference on the Antarctic and arrangements for the future joint development of Antarctic resources. It eventually became apparent, however, that neither Latin American nation would accept any arrangements leading toward the dilution of the full sovereignty that each claimed to possess in Antarctica. Plans to implement Roosevelt's memorandum were therefore abandoned.⁶¹

In any event, the State Department took immediate steps to avoid any incidents that might prejudice the efforts toward hemispheric solidarity. On August 8, Acting Secretary Welles instructed the United States diplomatic officers in all the American republics to inform the respective governments of the full scope and objectives of the United States expedition. This was to be done by a confidential memorandum, in which the purpose of the expedition would be stated as to collect scientific data and to determine the feasibility of establishing permanent settlements in Antarctica. The

⁶¹U. S., Department of State, "Territorial Claims in the Antarctic Advanced by Certain Governments," Foreign Relations of the United States, 1940 (Washington: United States Government Printing Office, 1957), Vol. 2, p. 339.

Latin Americans were to be informed of the recent decision by the interdepartmental committee to establish two Antarctic bases, one at Little America and the other 1000 miles east at the other side of the unclaimed sector, and of the specific programs of scientific research to be conducted by the United States. The following points were also to be covered in the memorandum: (1) the expanding Antarctic programs of non-American nations, (2) the Antarctic claims which had been asserted by the United Kingdom, Australia, New Zealand, France, and Norway, (3) the German efforts in the Antarctic, and (4) the interest in Antarctica manifested by Japan. It was also to be noted to the Latin Americans that the United States had never asserted territorial claims in the Antarctic although it had been active in the region. Finally, the diplomatic officers concerned were instructed to communicate orally to the respective governments that the United States Government was confident that any Antarctic claims conflicts that might arise between American nations would be resolved "among mutually satisfactory lines, in keeping with the spirit of trust and friendship which characterizes the relations prevailing between the twenty-one American Republics."⁶²

⁶²Acting Secretary of State to Diplomatic Officers in the American Republics, August 8, 1939, in "Establishment of the United States Antarctic Service," Foreign Relations, 1939, Vol. 2, pp. 9-10.

The United States made no effort, however, to reassure non-American claimants with regard to the nature and goals of the American expedition. When New Zealand again offered the United States the use of its 'facilities' in the Ross Dependency,⁶³ the United States replied simply that it foresaw no need for any New Zealand facilities other than those incidental to the expedition's intended visit to Dunedin.⁶⁴

By the middle of November, 1939, the interdepartmental committee had completed planning for the American expedition, and the results of this planning had been put into the form of a letter of instructions to Admiral Byrd. The committee met with Byrd on November 22 to discuss a preliminary draft of the instructions, and final revisions were made. Hugh Cumming then submitted the letter to the Secretary of State, who obtained the President's approval.⁶⁵ On November 25 Roosevelt signed the letter, which can be considered as the organic directive of the United States Antarctic Service, and sent it to Byrd.

⁶³British Ambassador in Washington to Secretary of State, November 17, 1939, in "Establishment of the United States Antarctic Service," Foreign Relations, 1939, Vol. 2, p. 10.

⁶⁴Secretary of State to British Ambassador in Washington, December 7, 1939, in Ibid., Vol. 2, p. 15.

⁶⁵Minutes of the Meeting of the Executive Committee of the United States Antarctic Service, File No. 800.014 Antarctic/341, November 22, 1939, U. S. National Archives, Dept. of State.

Roosevelt's letter formally designated the interdepartmental committee as the Executive Committee of the United States Antarctic Service, and the Committee was given the authority to appoint an Executive Secretary to assist it in its work. Rear Admiral Byrd was designated an ex-officio member of the Committee and the Commanding Officer of the Service, and he was instructed to establish two American bases in the Antarctic. East Base was to be located in the vicinity of Charcot Island or Alexander I Land, with the area around Marguerite Bay as an alternate site. West Base was to be constructed on the eastern coast of the Ross Sea in the vicinity of King Edward VII Land, with a site on the Bay of Whales at or near Little America as an alternate. Byrd was further instructed to keep the Executive Committee informed of operations and progress in the field and to refer to the Committee for approval any plans for operations beyond the limits specified below. In addition, Byrd was to work with the Committee in planning either the relief of the Antarctic bases or the evacuation of those bases if the Antarctic Service should be discontinued.⁶⁶

The primary mission of the expedition was to explore those Antarctic regions of greatest interest to the United

⁶⁶Roosevelt to Byrd, November 25, 1939, in "Establishment of the United States Antarctic Service," Foreign Relations, 1939, Vol. 2, pp. 11-14.

States and those in which the United States already possessed the strongest bases for territorial claims. The principal field objectives were stated in the letter as the "delineation" of the Antarctic coastline between 72° West and 148° West and the exploration of Hearst Land, James W. Ellsworth Land, and Marie Byrd Land.⁶⁷ It therefore appeared that the geographic focus of American activities would be the unclaimed sector, as had been implied to the congressional subcommittee and to Latin American Governments.

Roosevelt's letter continued, however, by listing as secondary objectives the delineation of the western coast of the Weddell Sea and the exploration of various mountain ranges in the interior of the Antarctic Continent. The letter also instructed Byrd to explore the area around the South Magnetic Pole and the unknown areas between the Weddell Sea and the South Geographic Pole.⁶⁸ Thus, even though the primary effort was to be conducted in the unclaimed sector, President Roosevelt and the Executive Committee were unwilling to confine United States activities and possible future claims to that region of Antarctica alone. They envisaged an effort in virtually all the areas of the Antarctic in

⁶⁷Roosevelt to Byrd, November 25, 1939, in "Establishment of the United States Antarctic Service," Foreign Relations, 1939, Vol. 2, p. 12.

⁶⁸Ibid., Vol. 2, p. 12.

which the United States had been historically involved, including territories claimed by Australia, New Zealand, and the United Kingdom and regions of interest to both Argentina and Chile. For this reason, the United States decided that it would remain committed to the Hughes Doctrine, and a policy statement to that effect had been released to the Press by the State Department on November 10.⁶⁹ Even though this decision would make it necessary for the United States to base Antarctic claims on permanent occupation, the continued reliance upon the Hughes Doctrine would facilitate any future American challenges to the claims of other nations, all of which had followed a less rigorous definition of effective occupation.

The United States had also decided to postpone any formal action on Antarctic claims until the bases for them had been firmly established. The precise policy which had been determined with regard to such claims was stated in Roosevelt's letter:

The United States has never recognized any claims to sovereignty over territory in the Antarctic regions asserted by any foreign state. No member of the United States Antarctic Service shall take any action or make any statements tending to compromise this position.

Members of the Service may take appropriate steps such as dropping written claims from airplanes,

⁶⁹The New York Times, November 10, 1939, p. 17.

depositing such writings in cairns, et cetera, which might assist in supporting a sovereignty claim by the United States Government. Careful record shall be kept of the circumstances surrounding each such act. No public announcement of such act shall, however, be made without specific authority in each case from the Secretary of State.⁷⁰

Even though the Antarctic Service had been established as an agency of the United States Government, it had many significant non-governmental aspects. The appropriation received from Congress was far from adequate to support the expedition, and it again had been necessary for Admiral Byrd to utilize his talent for fund raising. He succeeded in obtaining donations of funds and equipment valued at more than \$325,000 from the War and Navy Departments and an additional \$240,000 from private sources. The latter amount included contributions from Byrd himself, who, in addition, sold his polar ship, Bear of Oakland, for one dollar to the Navy for use on the expedition. Finally, a majority of the civilian members of the expedition had agreed to participate at the nominal salary of \$10 per month.⁷¹

Such unofficial procurement of supplies and recruitment of personnel was of crucial importance to the success of

⁷⁰Roosevelt to Byrd, November 25, 1939, in "Establishment of the United States Antarctic Service," Foreign Relations, 1939, Vol. 2, p. 13.

⁷¹Paul Siple, 90° South (New York: G. P. Putnam's Sons, c. 1959), pp. 63-66.

the expedition, but it led to difficulties in control and administration. Insofar as the United States Government was concerned, the primary mission of the expedition was the establishment of bases for American claims to Antarctic territory. Since any scientific research carried out in conjunction with the official expedition would have a bearing on these claims and therefore on United States relations with the other nations involved in the Antarctic, Roosevelt's letter contained the following paragraph--the controversial Paragraph 9(c), regarding secrecy:

As it is highly important that no journal or narrative of the enterprise, either partial or complete, should be published, without the authority and under the supervision of the Government of the United States, at whose expense this Service is undertaken, you will, before they reach the first port north of the Antarctic regions, require from every person under your command the surrender of all journals, diaries, memoranda, remarks, writings, charts, drawings, sketches, paintings, photographs, films, plates, as well as all specimens of every kind, collected or prepared during their absence from the United States.⁷²

Meanwhile, the expedition's vessels, North Star and Bear, had departed from Boston on November 15 and November 22 respectively; and the members of the expedition thus had no knowledge of the President's instructions until they were well

⁷²Roosevelt to Byrd, November 25, 1939, in "Establishment of the United States Antarctic Service," Foreign Relations, 1939, Vol. 2, p. 14.

at sea, where it was practically impossible for them to resign. The delay in the order had apparently been caused by the shortage of time and the difficulties inherent in planning an interdepartmental venture. In any event, Paragraph 9(c) was to cause a near mutiny among the civilian members, many of whom had agreed to work for nominal pay precisely because they had expected to gain financial reward or professional prestige as a result of making their work public.

Admiral Byrd boarded the North Star at Balboa, Canal Zone, on November 30 and immediately requested on behalf of the Executive Committee that the civilians sign a statement to the effect that they would follow the instructions on secrecy. Dr. Paul Siple, who had been in charge of logistics for the expedition and who would be one of the base leaders in Antarctica, described the confrontation that resulted:

Many [of the civilian personnel] insisted that they would leave the ship at the next port rather than submit. Finally they signed a statement that they had 'read' the order. When Byrd rather unhappily insisted that they had to add 'and will obey,' our civilian members retaliated with a private meeting at which they decided unanimously to resign in a body when we reached port. It was a determined group who met in Byrd's cabin with the Admiral. But he put it to the men as an act of faith that he would do his best to have the order rescinded, and on this basis the crisis ended.⁷³

Conflicts of this order seem to be inherent in operations

⁷³Siple, 90° South, p. 66.

that have both a political and a scientific mission. Similar problems would occur in future United States efforts in the Antarctic, where scientific operations have been inextricably connected with the political aims related to national claims positions. Indeed, "political results are inevitable by-products of research, else governments would not be paying the bills."⁷⁴ Not until the International Geophysical Year would the American scientific community and the United States Government appear to arrive at some sort of understanding of each other's goals and problems.

The expedition arrived in the Antarctic and discovered that conditions of access were such as to preclude the establishment of West Base as close to the unclaimed sector as had been desired. In accordance with the President's instructions, Little America was selected as the alternate site. The North Star arrived at the Bay of Whales on January 12, 1940, to be followed by the Bear two days later. After the base had been established, Byrd embarked aboard the Bear with the men who had been chosen to man East Base.⁷⁵

It had been hoped that the latter station could be constructed on Charcot Island, thus enabling the exploratory

⁷⁴Philip C. Jessup and Howard J. Taubenfield, Controls for Outer Space and the Antarctic Analogy (New York: Columbia University Press, 1959), p. 168.

⁷⁵Sullivan, Quest, pp. 140-141.

teams to penetrate the eastern region of the unclaimed sector from a point closer to its boundary than had heretofore been reached on the surface. Again, however, the thickness of the pack ice forced the expedition to select an alternate site, and East Base was established on Stonington Island, located in Marguerite Bay some 13° inside the British claim.⁷⁶

The principal objectives of the men who inhabited East Base were the crossing of the Palmer Peninsula and exploration of the coast to the east and the penetration of the unclaimed sector to the southwest. One party departed the base on November 9, 1940, and its members succeeded in becoming the first men to cross the Peninsula on the surface. They turned back on December 23, after having explored southward to 71° 51' South. Statements claiming the territory for the United States were deposited in cairns at various points along their route.⁷⁷

At the same time, another member of the expedition, Richard B. Black, was attempting to fulfill Roosevelt's secondary objective regarding the aerial exploration of the region to the southeast of East Base. He flew across the Palmer Peninsula and reached approximately 74° South. As was the practice with all the exploratory flights, Black

⁷⁶Sullivan, Quest, pp. 158-159.

⁷⁷ibid., pp. 160-163.

dropped a claims statement inside a metal cylinder at the furthest point reached.

A party under Finn Ronne, who would later lead a private expedition to Antarctica, was to enter the unclaimed sector and explore to the southwest. Its mission had been hindered by the failure to establish East Base as close to the sector as had been hoped, and it was therefore decided to airlift the group to Charcot Island and to commence the surface exploration from that point. This plan had to be abandoned because of unfavorable landing conditions on the snow, however, and Ronne's party had to make the entire trip on the surface. It was unable to reach even the boundary of the unclaimed sector before being forced to return by the lateness of the season and the depletion of supplies. A claims statement was deposited anyway--on Ecklund Island off the Robert English Coast--well within the British claim.⁷⁸

Meanwhile, the inhabitants of West Base were attempting to establish American rights to territory as far to the east as possible. In addition to the deposition of statements and the raising of flags at various points in the unclaimed sector, this group was responsible for the first claim to Antarctic territory by an official of the United States Government acting on instructions. On November 11, 1940, Leonard Berlin, a government surveyor, placed a statement

⁷⁸Sullivan, Quest, pp. 163-166.

atop Mount Grace McKinley, located barely within the unclaimed sector at the base of the Edward VII Peninsula, claiming the territory east of 150° West for the United States.⁷⁹

While the United States Antarctic Service was thus engaged in strengthening the bases of American claims, the two South American nations with interests in the Antarctic were taking steps to protect their respective positions. On July 5, 1939, Argentina formed a National Antarctic Commission of representatives of the Ministries of Foreign Relations and Worship, Agriculture, and the Navy. The task of this commission was to study Antarctic problems so that Argentina might be prepared to participate in an International Polar Exposition which was to be held in Bergen, Norway, the following October. The exposition was subsequently canceled because of the war, but the work of the Commission had demonstrated to the Argentine Government the necessity of a permanent Antarctic agency. The Commission was therefore given permanent character through an Argentine Presidential Decree of April 30, 1940, and placed under the Foreign Relations Ministry. It was instructed to continue to study Argentine interests in the Antarctic and to submit to the Executive specific plans for action to be taken by Argentina with regard to those interests.⁸⁰

⁷⁹Sullivan, Quest, p. 151.

⁸⁰Argentine Presidential Decree No. 61.852, April 30, 1940, in Naval War College, Documents, 1948-49, p. 219.

The Argentine National Antarctic Commission saw an imperative need to strengthen Argentine rights in the Antarctic and recommended on June 5, 1940, that a program of official activities be carried out in the region.⁸¹ As a result of this recommendation, an expedition was sent to the Palmer Peninsula and the South Shetland Islands in May, 1942, aboard the Argentine naval transport, Primero de Mayo. Members of the expedition raised the Argentine flag at various points and deposited bronze tablets proclaiming the existence of Argentine sovereignty over the areas in question.⁸² A comic-opera situation then proceeded to develop between Argentina and the United Kingdom.

When the Primero de Mayo returned to the Antarctic in 1943, the Argentines discovered that a British warship had visited the area in the meantime and that the Argentine tablets had been replaced with notices declaring the areas to be under British sovereignty. The Pimero de Mayo Expedition duly replaced the notices with new bronze tablets. The original tablets were later returned to the Argentine Government by the British Ambassador at Buenos Aires, with a note stating that the British Embassy "naturally took advantage of the opportunity to return the objects in ques-

⁸¹Naval War College, Documents, 1948-49, p. 218.

⁸²Christie, Antarctic Problem, p. 268.

tion."⁸³ There then ensued a series of protests and counter-protests accomplishing nothing.

The British Government was particularly concerned with the Antarctic during this period, for the region had become the site of German naval operations. On January 13, 1941, the German raider Penguin effected the simultaneous capture of 14 vessels of the Norwegian whaling fleet in the waters off the Princess Martha Coast of Queen Maud Land. This was perhaps the most spectacular success of the German raiders that found havens in the uninhabited islands of the sub-Antarctic, where their crews could go ashore for rest and relaxation and where rendezvous could take place with their supply ships in secrecy.⁸⁴ During the early years of the war, raiders operating in sub-Antarctic waters accounted for the sinking or capture of several hundred thousand tons of Allied shipping and the mining of the Australian ports of Sydney, Adelaide, Melbourne, and Hobart.⁸⁵

The British Navy was aware that the raiders were based somewhere in the Antarctic regions and searched the area constantly without success. It was during such a search that the Argentine tablets had been discovered on Deception

⁸³Christie, Antarctic Problem, pp. 268-269.

⁸⁴"German Raiders in the Antarctic during the War," The Polar Record, Vol. 4 (July, 1946), p. 402.

⁸⁵Sullivan, Quest, p. 266.

Island. Evidence now available indicates that the only site in the Antarctic utilized by raiders was Kerguelen Island, which had been claimed by France. The HMAS Australia searched Kerguelen Island in November, 1941, and laid mines in its harbor. There is no evidence of German use of the island after this date and no evidence at all of Japanese operations in the Antarctic during the war.⁸⁶

The concern over German raiders, coupled with that over the pro-Nazi sympathies which had become increasingly evident in Argentina since the coup of Generals Arturo Rawson and Pedro P. Ramirez in June, 1943, made Argentine control of both sides of the Drake Passage particularly unacceptable to the British Government. In addition, the two Primero de Mayo Expeditions had raised fears of an "Argentine coup in the Antarctic."⁸⁷ A small British military detachment was therefore sent to Antarctica, arriving on February 3, 1944. Its mission, under the code name, Operation Tabarin, was to guard Deception Island and to establish a base on the Palmer Peninsula. Argentina, however, conducted no further operations in the Antarctic during the war, and its National Antarctic Commission remained inactive for three years.⁸⁸

⁸⁶"German Raiders," pp. 402-403.

⁸⁷Christie, Antarctic Problem, p. 247.

⁸⁸Ibid., pp. 247-248, 269.

Also during the period in which the United States Antarctic Service was engaged in field operations, Chile took steps to protect its Antarctic position. As a result of the report submitted by the special commission created to study Chilean rights and interests in the Antarctic, President Pedro Aguirre Cerda of Chile issued the following decree on November 6, 1940:

All lands, islands, islets, reef [sic] of rock, glaciers (pack-ice), already known or to be discovered, and their respective territorial waters, in the sector between longitudes 53° and 90° West, constitute Chilean Antarctica or Chilean Antarctic territory.⁸⁹

Like Argentina, Chile based its claim on the geological affinity of the Palmer Peninsula to Chile proper and on succession to rights allegedly possessed by Spain prior to Chilean independence. In addition, as the nation closest to Antarctica, Chile claims rights to that continent on the basis of propinquity.⁹⁰

⁸⁹Chilean Presidential Decree No. 1747, November 6, 1940, in Oscar Pinochet-de la Barra, Chilean Sovereignty in Antarctica (Santiago: Editorial del Pacifico, 1955), pp. 53-54.

NOTE--Curiously, the northern boundary of the Chilean claim was not stated; and "Chilean Antarctica" can be interpreted as comprising virtually all the territory in the Western Hemisphere, including the eastern half of the United States. The Chilean Presidential Decree of November 6, 1940, is thus liable to the same criticism as that given by Chile itself to the British Letters Patent of 1908.

⁹⁰Oscar Pinochet-de la Barra, Chilean Sovereignty in Antarctica (Santiago: Editorial del Pacifico, 1955), pp. 1-52.

Chile immediately notified the United States, Japan, and Argentina of its claim.⁹¹ Realizing that its claim included regions of interest to Argentina, Chile proposed that a conference on the Antarctic be held between the two nations.⁹² This conference, which met in Santiago in May, 1941, resulted in no agreement other than that Argentina and Chile were the only nations possessing rights in the 'South American sector' of Antarctica.⁹³ Japan responded to the Chilean claim with a reservation of Japanese rights in the area concerned,⁹⁴ and the United States acted only to advise Chile to inform Japan that the Chilean acknowledgment of the note reserving Japanese rights was not to be considered as any recognition of those rights.⁹⁵

In its note replying to the Japanese reservations, Chile characterized its action as not a claim to a region which

⁹¹American Ambassador in Santiago to Secretary of State, November 7, 1940, in Foreign Relations, 1940, Vol. 2, p. 336.

⁹²American Ambassador in Buenos Aires to Secretary of State, November 9, 1940, in Ibid., Vol. 2, p. 336.

⁹³Robert D. Hayton, "The 'American' Antarctic," American Journal of International Law, Vol. 50 (July, 1956), p. 586.

⁹⁴Japanese Charge in Santiago to Chilean Minister of Foreign Relations, November 13, 1940, quoted in Chilean Ministry of Foreign Relations to Japanese Legation in Santiago, November 29, 1940, in Naval War College, Documents, 1948-49, p. 225.

⁹⁵Secretary of State to Ambassador in Santiago, November 26, 1940, in Foreign Relations, 1940, Vol. 2, p. 338.

had been res nullius but the delimitation of boundaries of areas which were already under Chilean sovereignty. Chile then implied recognition of the validity of the bases of United States and Argentine claims, stating that the Chilean territory was comprised of "regions to which the Argentine Republic could claim title by virtue of its propinquity on the eastern side, and to which the United States could claim title to the West."⁹⁶ Chile further implied recognition of the American acts of occupation in the unclaimed sector, stating that it was unable to discern any basis for Japanese reservations regarding:

. . . a triangle which, starting with seas and lands which belong to the Republic of Chile, terminates with its vertex at the South Pole; which is situated in the American Antarctic; which comprises regions possessed by Chile since long ago; and which borders to the east and west on zones occupied by Argentina and by the United States.⁹⁷

It appeared that the judicious reassuring of the Latin Americans by the United States State Department had produced the desired results. Both Chile and Argentina acted as if all threats to their Antarctic positions originated outside the Hemisphere and as if a United States claim, should such

⁹⁶Chilean Ministry of Foreign Relations to Japanese Legation in Santiago, November 29, 1940, in Naval War College, Documents, 1948-49, p. 225.

⁹⁷*Ibid.*, pp. 225-226.

be forthcoming, would be either confined to the unclaimed sector or based on mutual agreement among the three American claimants. Argentina and Chile would apparently have welcomed a United States claim to the unclaimed sector, believing that such an act, by bringing the United States into the 'club' of Antarctic claimants, would lead the United States to recognize their respective claims and support them more readily in any disputes with extra-Hemispheric powers.

Roosevelt's orders to Byrd, however, had promoted United States claims activity in various areas of Antarctica, including the 'South American sector;' and there is no evidence that the United States actually intended to give Argentina and Chile a free hand in the strategic Palmer Peninsula region.

Even though the United States Antarctic Service was achieving remarkable successes in the field without involving the United States in Antarctic disputes, the increasing fears of American involvement in the European war and the corresponding pressures of rearmament on the national budget led Congress to become less willing to finance American ventures in Antarctica. The Executive Committee of the Antarctic Service was aware as early as January, 1940, that the Service's appropriation for fiscal year 1941 would face

serious difficulties in Congress;⁹⁸ and the Committee accordingly prepared two budget estimates: one of \$250,000, which would enable the expedition to continue to operate, and one of \$171,000, which would provide for the evacuation of the American bases.⁹⁹ In contrast to the majority of congressmen, President Roosevelt believed that the work of the Antarctic Service should be continued especially because of the war in Europe. He thought that post-war settlements might well include cessions of Antarctic territory and that American rights in Antarctica should therefore be made as strong as possible.¹⁰⁰ Contrary to the wishes of the President, however, Congress allowed the Antarctic Service only the sum of \$171,000.¹⁰¹ The two American bases were evacuated, and the expedition arrived back in Boston in May, 1941.

The Executive Committee now had the responsibility of disposing of the journals, records, and data that had been

⁹⁸Executive Secretary, United States Antarctic Service, Lieutenant Commander R. A. J. English, United States Navy, to Byrd, Miscellaneous File, January 18, 1940, U. S. National Archives, Center for Polar Archives, U. S. Antarctic Service.

⁹⁹Appropriations File, U. S. National Archives, Center for Polar Archives, U. S. Antarctic Service.

¹⁰⁰Minutes of the Meeting of the Executive Committee of the United States Antarctic Service, File No. 800.014 Antarctic/510, June 5, 1940, U. S. National Archives, Dept. of State.

¹⁰¹U. S., Statutes at Large, Vol. 54 (1941), p. 643.
"Second Deficiency Appropriation Act of 1940."

turned over to it in accordance with Paragraph 9(c) of Roosevelt's instructions. It had been intended that the Executive Committee would supervise the preparation of a history of the Antarctic Service by Admiral Byrd and that the Executive Committee and the National Academy of Sciences together would prepare and edit the scientific data obtained by the expedition;¹⁰² and Congress appropriated the sum of \$19,610 for this purpose in June, 1941.¹⁰³ This administrative task would have been difficult to fulfill even under the best of circumstances. In an operation that was in the process of being phased out, the task became an impossibility.

During the months in which the expedition had been in its early stages, the Executive Committee had met at scheduled monthly sessions, with special sessions when necessary. With the approach of war, however, those involved in Antarctic policy-making began to spend less and less time on Antarctic matters as their attention, and that of their respective departments, shifted to other, more crucial, concerns. It was in such a way that the executive branch of the United States Government became disengaged from the Antarctic; and by early 1940 the State Department had for all practical

¹⁰²Roosevelt to Byrd, November 25, 1939, in "Establishment of the United States Antarctic Service," Foreign Relations, 1939, Vol. 2, p. 14.

¹⁰³U. S., Statutes at Large, Vol. 55 (1942), p. 360. "Interior Department Appropriation Act of 1942."

purposes terminated its involvement with the Antarctic Service. The last meeting of the Executive Committee was apparently held on November 4, 1941. After this date, the responsibilities of the Committee were carried out by the Executive Secretary, who sought the advice and consent of the Committee members when necessary.¹⁰⁴

Inasmuch as the United States Antarctic Service became inactive rather abruptly as a result of the war, "wartime assignments and pressures presumably scattered the personnel before data could be studied and reports put in final form."¹⁰⁵ Even the small appropriation granted in 1941 was never fully expended. On July 2, 1942, Congress granted a final authorization, allowing the Antarctic Service to utilize a sum not to exceed \$30,000 from its unspent balances.¹⁰⁶ When this authorization expired on June 30, 1943, the United States Antarctic Service ceased all operations. The official history of the service has never been written, and most of the data obtained by the expedition has never been processed.

¹⁰⁴Dewing and Kelsay, "Records of the United States Antarctic Service," p. 2.

¹⁰⁵Ibid., p. 6.

¹⁰⁶U. S., Statutes at Large, Vol. 56 (1943), p. 597. "Second Deficiency Appropriation Act of 1942."

THE ERA OF CONFLICT: 1945-1950

Even though World War II had caused the United States to suspend field operations in the Antarctic, the goals and policies upon which those operations had been based remained unchanged in 1945. Indeed, a new factor had been added: the existence of a potentially-hostile Soviet Union across the Arctic regions from the United States caused American military strategists to see an urgent need for training military forces in polar warfare. With this object in mind, a six-ship naval exercise, Operation Nanook, was held in Arctic waters in the summer of 1946; and the Navy intended to conduct a major fleet exercise in the same region in 1947.¹

In the meantime, Admiral Byrd had been attempting to gain official support for the continuance of the work commenced by the United States Antarctic Service. With the death of his friend and supporter, President Roosevelt, he met with no success until fears began to be raised within the government that the Arctic exercise planned for 1947 might antagonize the Soviets unduly. The attention of the Navy thus shifted to the Antarctic; and in August, 1946, Byrd succeeded in obtaining the approval of his proposals from the Chief of Naval Operations, Fleet Admiral Nimitz,

¹Walter G. Sullivan, Quest for a Continent (New York: McGraw-Hill, c. 1957), p. 173.

and Secretary of the Navy Forrestal.²

On August 26, 1946, Admiral Nimitz issued the confidential orders for what remains the largest Antarctic expedition ever mounted by any nation--Operation Highjump. The Navy released details of the planned operation to the press on November 12, 1946, stating that units of both the Atlantic and Pacific Fleets would be sent to the Antarctic as early in 1947 as permitted by the condition of the Antarctic ice pack and would carry out programs of training and research for the duration of the navigable season. The specific objectives of Operation Highjump were listed in the press release as the following: (1) training personnel and testing equipment under polar conditions, (2) continuing the work of the United States Antarctic Service Expedition, (3) gaining experience in the establishment of polar bases, and (4) conducting research in various scientific fields.³

The operation order itself, which remained confidential until 1955, listed still another objective of the expedition--one which had not appeared in the press release--that of "consolidating and extending United States sovereignty over

²Paul Siple, 90° South (New York: G. P. Putnam's Sons, c. 1959), p. 76; and Sullivan, Quest, p. 173.

³U. S., Department of the Navy, Press Release, November 12, 1946, in "United States Navy Department Expedition to the Antarctic (Operation Highjump), 1946-47," The Polar Record, Vol. 4 (July, 1946), pp. 399-401.

the largest practicable area of the Antarctic Continent."⁴ It was therefore evident that the United States had abandoned neither the policies leading toward eventual claims to Antarctic territory nor Roosevelt's policy of maintaining secrecy to avoid diplomatic complications before such claims were formally asserted.

The control of Operation Highjump was vested almost entirely in the Navy, although arrangements were made with other governmental agencies for scientific research to be conducted in non-military fields. Rear Admiral Byrd was placed on duty in the Office of the Chief of Naval Operations as a special adviser on polar matters and was given technical control of the expedition as officer-in-charge of the field programs to be carried out by Operation Highjump under the name, Antarctic Development Project 1947. The scientific program was placed under the overall guidance of the Director of Naval Research, Rear Admiral P. F. Lee. The 13 ships and 4,700 men which comprised the actual expedition were formed into Task Force 68 under Rear Admiral Richard H. Cruzen, who exercised tactical command in the field.⁵

⁴U. S., Navy, Operation Order, Operation Highjump (August 26, 1946), Library of the U. S. Naval Support Force, Antarctica, Washington, D. C.

⁵U. S., Department of the Navy, Press Release, November 12, 1946, in "Expedition, 1946-47," pp. 400-401.

The Navy also planned to utilize the publicity attendant on such an expedition as a means toward increasing the level of public support for its activities, hoping thereby to insulate itself somewhat against the post-war budget cuts currently in progress. Accordingly, arrangements were made with Metro-Goldwyn-Mayer Studios in Hollywood for a motion picture to be made of the exploits of the expedition. The film was subsequently released under the title, "The Secret Land."⁶

Once in the Antarctic, the expedition would be divided into three sections: East Group, West Group, and Central Group. The latter had the responsibility of constructing a base and air field at Little America, to which the carrier Philippine Sea would dispatch aircraft for use in exploring the interior of the continent. East and West Groups would each be organized around a seaplane tender and would travel along the coast in opposite directions while their aircraft conducted photo-mapping operations.⁷

On December 30, 1946, the ships assigned to Central Group rendezvoused off Scott Island in the northern reaches of the Ross Sea. Although the pack-ice was among the heaviest recorded for that sector and season, the icebreaker

⁶Sullivan, Quest, p. 222.

⁷Ibid., p. 174.

Northwind succeeded in clearing a route to Little America. This marked the advent of the modern icebreaker in Antarctic operations, and the success of the Northwind had a profound effect on the conduct of future expeditions.⁸

The Navy had planned to construct the airfield at Little America of pierced-planking, which had been used successfully during the war in situations where a hard-surfaced runway had to be obtained in a short period of time. Delays caused the idea to be abandoned, however; and the aircraft were forced to operate with skis, which reduced their speed and range. Even with this handicap, the 3 groups together managed to take some 70,000 aerial photographs, which involved an estimated total of 350,000 square miles of newly-discovered territory. Sixty percent of the Antarctic coastline was photographed by the expedition, and twenty-five percent of this involved heretofore unseen areas.⁹

Also during 1947, Commander Finn Ronne, United States Naval Reserve, was completing his plans for a privately-financed expedition to the Antarctic. He intended to cut his costs by utilizing the abandoned American base at Stonington Island in Marguerite Bay, from which he had operated as a member of the Antarctic Service. A British expedition was currently encamped on the island, and Ronne requested

⁸Sullivan, *Quest*, p. 183.

⁹*Ibid.*, pp. 215, 247.

the State Department to ask the British for a report on the condition of the American buildings and equipment, which were located some 200 yards from the British base. The British Government, however, had recently learned of the plans of both Chile and Argentina to establish bases in the Palmer Peninsula region during the upcoming season and feared that the addition of an American base in the same area would further weaken the British claims position. The British Embassy in Washington therefore attempted to discourage Ronne, replying to the State Department that Stonington Island had neither enough seals for dog food nor sufficient space to support two expeditions.¹⁰

The State Department dismissed the British objections to Ronne's plans for two reasons. First, the limited budget of the Ronne Expedition precluded its constructing a new base in the Antarctic. Second, the Department was still promoting the strengthening of American rights in Antarctica with a view toward the future assertion of territorial claims, and it intended for the Ronne Expedition to add to the claims bases that had been established in the Palmer Peninsula region by the men of the United States Antarctic Service.¹¹

¹⁰Statement by Acting Secretary of State Dean Acheson, December 27, 1946, in "Clarification of U. S. Position on Antarctic Claims," Department of State Bulletin, Vol. 16 (January 5, 1947), p. 30.

¹¹Sullivan, *Quest*, pp. 271-272.

In fact, the State Department had apparently come to believe that the work of the Ronne Expedition, coupled with that of Operation Highjump, would finally strengthen the bases of United States Antarctic claims to the point where a formal claim could be defended successfully in the international diplomatic and legal arena.

On January 5, 1947, State Department officials reportedly disclosed to The New York Times that the United States would definitely assert claims to Antarctic territory in the very near future. It was further disclosed that interdepartmental conferences would be held in the spring, after Admiral Byrd's return to the United States upon the completion of Operation Highjump, to consider the timing of formal claims, the resolution of claims disputes, and future United States Antarctic programs.¹² Even though it was also reported in The New York Times that the claims were expected to be based largely on American activities in the unclaimed sector, the Palmer Peninsula remained of great interest to the United States Government. Any formal American claims would probably have included at least a part of the latter region, and unknown to the British and Latin Americans, the State Department arranged for Ronne to be sworn in as a postmaster so that he could operate an official United States Post Of-

¹²"U. S. Maps Formal Claims," The New York Times, January 6, 1947, p. 21.

fice on Stonington Island and thus help to fulfill juridical requirements of administration.¹³

Three days after the reported disclosure of United States intentions regarding Antarctica, Secretary of State Byrnes was asked at a press conference if he were planning to call an international conference to consider the matter of Antarctic claims. Byrnes replied that he did not believe the matter was of sufficient urgency to warrant an international conference, especially in view of the large number of conferences already scheduled on more essential subjects.¹⁴

By February 23, 1947, the last contingent of Operation Highjump had left Antarctica by icebreaker. On March 12 Ronne arrived at Stonington Island, and after a period of strained relations between his expedition and that of the British, the two expeditions agreed to pool their resources and conduct joint scientific operations.¹⁵ Within the next 15 months, however, not only did the United States fail to assert the Antarctic claims which now appeared imminent, but the State Department was pressing for the conference on Antarctica that Secretary Byrnes had thought to be unnecessary. The reasons for these shifts in policy lay in the

¹³Sullivan, *Quest*, p. 272.

¹⁴"Byrnes Cool to Conference," *The New York Times*, January 8, 1947, p. 13.

¹⁵Sullivan, *Quest*, pp. 272-273.

worsening dispute over the Antarctic between the United Kingdom and the two Latin American claimants.

At the end of World War II, the United Kingdom's Operation Tabarin had been reorganized on a civilian basis and had been placed under the Colonial Ministry. Renamed the Falkland Islands Dependencies Survey, its mission became that of conducting scientific studies and maintaining the bases of British Antarctic claims through occupation. This brought the United Kingdom into direct conflict with Argentina, for in 1946 the Antarctic became a major point of emphasis of the foreign policy of the Peron Regime. The Argentine National Antarctic Commission was also reorganized, and its membership was increased to include representatives of the Ministries of Aeronautics and Justice. Its mission was broadened to include the planning of expeditions to strengthen the bases of Argentine territorial claims.¹⁶

Argentina finally indicated the precise extent of its claim to the mainland of Antarctica on June 3, 1946, in a note to the United Kingdom. Argentina stated in the note that it had learned of the release of a new series of postage stamps intended for use in the Falkland Islands Dependencies and that it was informing the Universal Postal Union that the validity of the stamps would not be recognized in

¹⁶E. W. Hunter Christie, The Antarctic Problem (London: Allen and Unwin, 1951), pp. 251, 269.

Argentina. Argentina reiterated its claim to sovereignty over the Falklands themselves and added that it possessed an "indisputable right" to the Antarctic territory between 25° West and 68° 34' West, south of 60° South.¹⁷ The Argentine claim was indicated as extending westward to 74° West in an official map published by the Military Geographic Institute in November, 1946,¹⁸ and this delimitation also appeared in March, 1947, in a publication of the Argentine National Antarctic Commission.¹⁹ Argentina currently (1969) considers 74° West as the western boundary of its Antarctic sector, which includes almost the entire sector claimed by the United Kingdom and overlaps the Chilean sector by 21 degrees.

In early 1947, in conjunction with an intensive propaganda campaign to foster public support for its Antarctic policies, Argentina launched its largest Antarctic expedition up to that time. The expedition carried out various scientific programs, placed navigational aids in Antarctic waters, and established an Argentine base on Gamma Island

¹⁷Argentine Minister of Foreign Relations, Juan I. Cooke, to British Ambassador in Buenos Aires, Sir Reginald Leeper, June 3, 1946, in U. S., Naval War College, "Declarations Concerning Antarctic Territories," International Law Documents, 1948-49 (Washington: United States Government Printing Office, 1950), pp. 222-223.

¹⁸Christie, Antarctic Problem, p. 270.

¹⁹Naval War College, Documents, 1948-49, p. 218.

in the Melchoirs.²⁰ During the same season, a Chilean expedition visited the South Shetlands and established a base on Greenwich Island.²¹ The United Kingdom responded to what it considered as unauthorized foreign activities on British territory with notes of protest to Argentina and Chile, all of which were summarily rejected.²²

Argentina and Chile, moreover, were soon presented with an opportunity to gain wider support in their respective Antarctic claims disputes with the United Kingdom. On August 15, 1947, delegations from 20 American Republics met at Quitandinha, near Rio de Janeiro, Brazil, and, after conferring for 18 days, signed the Inter-American Treaty of Reciprocal Assistance (Rio Pact). In Article 3 of the Treaty, the Contracting Parties agreed that "an armed attack by any State against an American State shall be considered as an attack against all the American States" and that in such a case each Party would undertake "to assist in meeting the attack in the exercise of the inherent right of individual or collective self-defense recognized by

²⁰Juan Carlos Moreno, Nuestras Malvinas; La Antartida (Buenos Aires: El Ateneo, 1964), p. 237.

²¹Oscar Pinochet-de la Barra, Chilean Sovereignty in Antarctica (Santiago: Editorial del Pacifico, 1955), p. 55.

²²Christie, Antarctic Problem, p. 257.

Article 51 of the Charter of the United Nations."²³ Of greater importance to the existing situation in the Antarctic, however, was Article 6, which states that in cases of aggression which is not an armed attack, the Organ of Consultation, defined in Article 11 as the Meetings of Foreign Ministers of the American Republics, would meet immediately to seek agreement on the measures to be taken to assist the victim of the aggression. Such aggression was specifically defined in Article 9(b) as:

Invasion, by the armed forces of a State, of the territory of an American State, through the trespassing of boundaries demarcated in accordance with a treaty, judicial decision, or arbitral award, or, in the absence of frontiers thus demarcated, invasion affecting a region which is under the effective jurisdiction of another State.²⁴

Finally, at the insistence primarily of the Argentine delegation, the Security Zone in which the Treaty was to be operative included the sector of Antarctica between longitudes 24° West and 90° West, which comprised both the Argen-

²³Inter-American Treaty of Reciprocal Assistance, in U. S., Department of State, Inter-American Conference for the Maintenance of Continental Peace and Security, Quitandinha, Brazil, August 15-September 2, 1947: Report of the Delegation of the United States of America (Washington: United States Government Printing Office, 1948), pp. 59-65.

²⁴*Ibid.*, pp. 59-65. Italics mine.

tine and Chilean claims in their entirety.²⁵

Since Argentina and Chile claimed to be exercising "effective jurisdiction" over their respective Antarctic territories, they could be expected to invoke the Rio Pact in the near future against the Antarctic activities of the United Kingdom. As if to underline this intention, both Latin American nations made reservations to the Final Act of the Conference stating that they did not recognize the existence of European possessions within the Security Zone of the Treaty and that they specifically reserved their rights and titles to the territories included in their respective Antarctic claims.²⁶ By thus refusing to recognize the existence of British 'possessions' in the Antarctic, Argentina and Chile could claim that British activities in the region constituted aggressive trespass as defined in Article 9(b) of the Treaty.

The United States delegation to the conference, headed by Secretary of State George C. Marshall, did not wish to see the United States called upon at some future date to

²⁵Inter-American Treaty of Reciprocal Assistance, in Quitandinha, Report of the U. S. Delegation, pp. 59-65; and Harold F. Peterson, Argentina and the United States 1810-1960 (New York: State University Press, 1964), p. 467.

²⁶Statements of Argentina and Chile after the Resolutions of the Final Act of the Inter-American Conference for the Maintenance of Continental Peace and Security, in Quitandinha, Report of the U. S. Delegation, p. 56.

take measures toward ousting the British from Antarctica or, for that matter, from British Honduras, which had been the subject of similar reservations by Mexico and Guatemala; and although no nation was bound under the Rio Pact to use armed force against an aggressor, any lesser measures to which two-thirds of the Contracting Parties might agree were binding on all.²⁷ The United States therefore made a reservation to the Final Act, recording its position that the Rio Pact had no effect upon the sovereignty or the "national or international status" of any of the territories located within the Security Zone.²⁸

Despite the United States reservation, both Latin American claimants continued to maintain that the British presence in Antarctica was contrary to the terms of the Rio Pact. The Chilean Minister of Foreign Relations, German Vergara, who had headed his country's delegation to the Conference, formally stated this position five months later:

. . . the Chilean Government feels that its interests in the American Antarctic are securely bound to the principles of continental security and that in defending them unhesitatingly they are merely carrying out obligations which they have con-

²⁷Inter-American Treaty of Reciprocal Assistance in Quitandinha, Report of the U. S. Delegation, pp. 59-65.

²⁸Statement of the United States after the Resolutions of the Final Act of the Inter-American Conference for the Maintenance of Continental Peace and Security, in Quitandinha, Report of the U. S. Delegation, p. 57.

tracted in respect of these principles.²⁹

By December, 1947, tensions between the United Kingdom and the two Latin American claimants had risen considerably, and the British Government instructed the Governor of the Falkland Islands, Miles Clifford, to visit the British Antarctic sector aboard a Royal Navy frigate, the H. M. S. Snipe.³⁰ On December 17, the United Kingdom registered a strong protest against the recent Argentine and Chilean activities in the Antarctic and offered the two nations the alternatives of applying for British leases for the sites of their Antarctic bases or submitting the claims dispute to the International Court of Justice, to whose decision the United Kingdom would bind itself in advance. If Argentina and Chile were to reject both these alternatives, the United Kingdom stated that it would be compelled to request that their Antarctic bases be evacuated. The United Kingdom also reserved its right to take action in the interim to insure that its sovereignty was respected.³¹

²⁹Chilean Minister of Foreign Relations to British Ambassador in Santiago, January 31, 1948, in "Antarctic Claims--Recent Diplomatic Exchanges between Great Britain, Argentina, and Chile," The Polar Record, Vol. 5 (January-July, 1948), p. 240.

³⁰Christie, Antarctic Problem, p. 258.

³¹British Ambassador in Buenos Aires, Sir Reginald Leeper, to Argentine Minister of Foreign Relations and Worship, and British Ambassador in Santiago, J. H. Leche, to Chilean Minister of Foreign Relations, December 17, 1947, in "Recent Diplomatic Exchanges," pp. 229-231, 237-239.

Meanwhile, Argentina had sent a naval task force to establish a new base on Deception Island. This island has the one good harbor in the region and is considered the 'gate-way' to the Palmer Peninsula. The United Kingdom responded on December 23 with a second protest to Argentina against what were characterized as continuing acts of trespass on British territory.³²

By the beginning of 1948, the Antarctic situation appeared to be leading toward serious conflict. The British frigate Snipe arrived in the Antarctic on January 17 but limited its action to the exchange of protests with the commanders of the Argentine bases. On January 23 Argentina announced that it was sending a detachment of mountain troops to the Antarctic.³³ Five days later, Argentina replied to the British protests in a strongly-worded note. Rejecting the alternatives offered by the United Kingdom, Argentina stated that if it submitted the dispute to the International Court, it could appear to be in the position of requesting something which it possessed de jure but not de facto. Argentina refused to place itself in such a position, claiming that its permanent Antarctic stations proved

³²British Ambassador in Buenos Aires to Argentine Minister of Foreign Relations and Worship, December 23, 1947, in "Recent Diplomatic Exchanges," pp. 232-233.

³³Christie, Antarctic Problem, pp. 258-259, 274.

that its sovereignty was being exercised effectively.³⁴ Enclosed with the Argentine note was a copy of a joint declaration on the Antarctic, signed six months earlier by the two Latin American claimants, which stated that Argentina and Chile were convinced of their rights in the Antarctic and intended to conclude a treaty regarding the boundaries of their respective Antarctic claims.³⁵ Argentina now invoked this declaration as further justification for its refusal to submit the dispute to the International Court:

Argentina has always honoured her word. It would be a breach of this practice if she were now to apply on her own to the international court to present her request for sovereignty over the Antarctic.³⁶

Chile similarly rejected the British proposals on January 31.³⁷ Two weeks later, a major portion of the Argentine Navy was sent to Antarctic waters for 'manuevers;' and the British Government quickly responded by sending another

³⁴Argentine Minister of Foreign Relations and Worship, Juan A. Bramuglia, to British Ambassador in Buenos Aires, January 28, 1948, in "Recent Diplomatic Exchanges," pp. 233-236.

³⁵Joint Declaration of Argentina and Chile on the Antarctic, Buenos Aires, July 12, 1947, in Naval War College, Documents, 1948-49, pp. 226-227.

³⁶Argentine Minister of Foreign Relations and Worship to British Ambassador in Buenos Aires, January 28, 1948, in "Recent Diplomatic Exchanges," p. 236.

³⁷Chilean Minister of Foreign Relations, German Vergara, to British Ambassador in Santiago, January 31, 1948, in Ibid., p. 240.

warship, the cruiser Nigeria, to join the frigate already there. There was fortunately no armed confrontation; the British warships arrived off Deception Island after the Argentine force had left the region, and British action was again limited to a round of local protests.³⁸ This marked the peak of the crisis, and no serious diplomatic or military incidents occurred during the remainder of the year. Argentina and Chile continued, however, to apply pressure to the United Kingdom through the Inter-American System, in their attempt to obtain the support of other nations of the Western Hemisphere for their Antarctic claims.

The Ninth International Conference of American States was scheduled to open in Bogota, Colombia, on March 30, 1948, and one of the items on its agenda was the question of European colonies in the Western Hemisphere. The colonial issue could be counted upon to arouse emotions in Latin America, and Argentina and Chile intended to make full use of this issue in their dispute with the United Kingdom over Antarctica.³⁹ In order to facilitate a common front against the United Kingdom at Bogota, Argentina sent a special ambassador, Pascual La Rosa, to Santiago to discuss the Ant-

³⁸ Christie, Antarctic Problem, pp. 260, 274.

³⁹ Olive Holmes, "Antarctic Claims Raise Colonial Issue in Americas," Foreign Policy Bulletin, Vol. 27 (September 3, 1948), p. 2.

arctic situation with Chilean Foreign Minister German Vergara.⁴⁰ As a result of these discussions, Argentina and Chile signed a second joint declaration on the Antarctic, which stated that the two nations would act together in the protection of their rights in the "South American Antarctic."⁴¹

There was an obvious inconsistency between the intended use of the colonial issue at Bogota and the reservations that Argentina and Chile had made at the Rio Conference regarding the non-recognition of the existence of European possessions in the Western Hemisphere. This inconsistency apparently went unnoticed, however, and the two nations were able to gain significant support within the Americas, aided by the present or past disputes of other Latin American nations with the United Kingdom over questions of territorial sovereignty. Guatemala, for example, called upon the United States to assist Latin American nations in such disputes, including that over Antarctica, and stated that the failure of the United States to do so quickly would result in the "bankruptcy" of the Inter-American System.⁴²

On the first day of the Bogota Conference, the items

⁴⁰Pinochet, Chilean Sovereignty, p. 57.

⁴¹Joint Declaration of Argentina and Chile on the Antarctic, March 4, 1948, in Naval War College, Documents, 1948-49, p. 227.

⁴²"Guatemala Bids U. S. Act in Belize Case," The New York Times, February 29, 1948, p. 12.

on the agenda were apportioned among six working committees; and various political and juridical issues, which included the colonial question, were assigned to the Sixth Committee.⁴³ In this committee, Argentina, Chile, and Guatemala promoted a resolution calling for the complete elimination of all European colonies in the Western Hemisphere.⁴⁴ The United States thus found itself in a rather awkward position between its Latin American and European allies. The United States, moreover, was a colonial power itself and did not wish to risk compromising its interests in its own dependencies. The United States delegation to the Conference, again headed by Secretary Marshall, therefore opposed the anti-colonial resolution and was successful in obtaining the passage of a version which called merely for the establishment of an 'American Committee on Dependent Territories' to consider the problem at a later date. Even on this milder resolution, the United States abstained from voting.⁴⁵

The conflict over Antarctica had placed the United States in a position where it could become forced to choose between its desire to cement relations with Latin America on the one hand and, on the other, that of supporting its allies

⁴³Gordon Connell-Smith, The Inter-American System (London: Oxford University Press, 1966), pp. 196-197.

⁴⁴Harold F. Peterson, Argentina and the United States 1810-1960 (New York: State University Press, 1964), pp. 469-470.

⁴⁵Ibid., p. 470.

in Europe. Even if the United States could remain neutral in the Antarctic claims dispute, it still feared that the attention of both sides could become diverted from what it considered to be the major issue of solidarity in the face of the Cold War.⁴⁶ Furthermore, the dispute had increased in seriousness over the preceding two Antarctic operating seasons and could easily develop into armed conflict in seasons to come.

It was thus becoming increasingly evident that the United States policy of countering the pressures of foreign claims by attempting to strengthen the bases of its own claims would lead neither toward a stable political situation in the Antarctic nor toward an atmosphere facilitating the scientific research that had proved to be of such great value. At the height of the Anglo-Argentine-Chilean confrontation, therefore, the United States began to re-evaluate its goals and policies regarding Antarctica, and the Departments of State and Defense commenced studies on Antarctica in relation to three possible policy alternatives. These alternatives were (1) to formally assert a territorial claim or claims and seek judicial settlement of disputes, (2) to attempt to establish a condominium administered jointly by the nations with direct interests in the Antarc-

⁴⁶Walter G. Sullivan, "Antarctica in a Two-Power World," Foreign Affairs, Vol. 36 (October, 1957), p. 160.

tic, or (3) to promote international control on a broad basis, possibly under the United Nations.⁴⁷

With regard to the assertion of formal claims, the United States was faced with the same problem that had existed in the past: its bases for claims were the strongest in the least desirable region of the continent. Moreover, the American position in the potentially-valuable Palmer Peninsula region appeared to have weakened in the past five years, during which period the three claimants had established a total of nine stations in the region while the only American activity had been the occupation of Stonington Island for eleven months by the unofficial Ronne Expedition.⁴⁸ Finally, a formal United States claim offered no solution to the current Antarctic conflict, inasmuch as Argentina and Chile had made it perfectly clear in their correspondence with the United Kingdom that they would not submit their claims to judicial determination.

The actual results of the studies conducted within the United States Government are unavailable at this time (1969). The United States concluded, however, that scientific research constituted the most significant American interest

⁴⁷John Hanessian, Jr., The Nonclaimant Nations (Part 3, National Activities and Interests in Antarctica, 3 parts, New York: American Universities Field Staff, 1962), p. 16.

⁴⁸Christie, Antarctic Problem, p. 261.

in Antarctica and that this interest could best be served by the establishment of some type of international regime. Such a regime could offer the advantages of enabling scientists to operate freely in all areas of the Antarctic and, at the same time, could provide a peaceful solution to the Anglo-Argentine-Chilean claims dispute without the United States being forced to abandon its neutrality in the matter. As a result of these conclusions, the United States commenced informal discussions in the summer of 1948 with the seven Antarctic claimants, in hopes of obtaining agreement to a conference leading toward "some form of internationalization" of the Antarctic.⁴⁹

The American proposals had particular appeal to the United Kingdom, whose Antarctic policy had undergone changes as a result of the claims dispute. The United Kingdom had shown no interest in creating international arrangements for the Antarctic in the past, but now, with the adamant positions of Argentina and Chile and the corresponding unwillingness of these two nations to accept a judicial solution, the only other alternatives open to the United Kingdom were (1) to continue in the present situation, risking increased friction and possible damage to its commercial

⁴⁹"Discussions Asked on Territorial Problem of Antarctica," Department of State Bulletin, Vol. 19 (September 5, 1948), p. 301.

interests in Latin America, or (2) to negotiate the liquidation of its territorial claims in favor of the Latin American claimants.⁵⁰ Accordingly, the United Kingdom indicated its willingness to accept the American proposals in principle.⁵¹ Observers reported from London, however, that the British, sensitive to losses of other colonial holdings and to recent affronts to its sovereignty by smaller nations, would probably study the American proposals very carefully before making any final commitments.⁵²

Besides the United Kingdom, only New Zealand demonstrated any interest in the American proposals, which were rejected flatly by Chile;⁵³ and, as had occurred eight years before in regard to President Roosevelt's ideas toward inter-Americanizing the 'American sector,' the United States ceased its efforts toward implementing the proposals. In both cases, the recipients of the proposals were or soon would be partners of the United States in defense alliances which it had no wish to jeopardize over the Antarctic question; and in both cases, the United States was unwilling to apply

⁵⁰Robert D. Hayton, "The 'American' Antarctic," American Journal of International Law, Vol. 50 (July, 1956), p. 609.

⁵¹"Antarctic Accord Pressed by U. S.," The New York Times, August 28, 1948, p. 12.

⁵²"U. S. Proposes Joint Rule to End Antarctic Disputes," The New York Times, August 29, 1948, p. 4.

⁵³Ibid., p. 4.

further pressure to the claimants once their firm opposition to, or lack of interest in, the internationalization of Antarctica had been registered. On their parts, the claimants appeared to comprehend the dilemma of the United States and take it into consideration in the formulation of their own Antarctic policies.

With the failure of the United States to effect an international agreement concerning sovereignty in the Antarctic, the United Kingdom commenced discussions with the two Latin American claimants. The British hoped that the three nations could reach agreement among themselves, if not on a solution to the basic conflict, at least upon measures reducing the risk of incidents that could lead to a further deterioration of relations and perhaps to the use of force. As a result of these discussions, the three nations agreed not to send warships south of latitude 60° South during the Antarctic summer of 1948-1949 except for routine operations such as had been customary for a number of years.⁵⁴ The United States had been kept informed of the progress of the discussions and announced that it did not contemplate sending any vessels into the region during the period in ques-

⁵⁴Statement of the British Foreign Office, January 18, 1949, in "Territorial Claims in the Antarctic," *The Polar Record*, Vol. 5 (January-July, 1949), p. 361.

tion.⁵⁵ The agreement was extended by the three claimants annually up to the International Geophysical Year.

In the preceding Antarctic summer, the United States had mounted a small expedition. As a result of the successes of the icebreaker Northwind during Operation Highjump, the Navy developed the idea of pairing helicopters with icebreakers in order to survey and photograph coastal areas which had previously been inaccessible. The expedition was named Operation Windmill and carried out the 'Second Antarctic Developments Project (1947-1948).' It involved two icebreakers, organized as Task Force 39 under the command of Commander Gerald Ketchum, United States Navy.⁵⁶ Admiral Byrd then attempted to obtain official approval for another expedition to continue the mapping work of Operations Highjump and Windmill. He believed that with recent improvements in techniques and equipment, it should now be possible to complete the mapping of the entire continent. Since two-thirds of Antarctica still remained unseen and unexplored, such a feat could enable the United States to assert a claim to virtually the entire continent.⁵⁷

⁵⁵Statement of the United States State Department, January 18, 1949, in "Territorial Claims," p. 361.

⁵⁶Sullivan, Quest, p. 249.

⁵⁷Paul Siple, 90° South (New York: G. P. Putnam's Sons, c. 1959), p. 81.

The Navy approved Byrd's proposals, and the expedition, Operation Highjump II, was planned for the 1949-1950 season. On August 2, 1949, the Navy released details of the expedition to the Press, stating that 8 vessels and 3,500 men would be involved.⁵⁸ Two weeks later, however, Assistant Secretary of the Navy Dan A. Kimball announced that the forthcoming expedition had been cancelled due to reasons of economy.⁵⁹ No further explanations were offered by the Navy Department, and all Navy press officers were instructed not to discuss the matter beyond the statement of Assistant Secretary Kimball.⁶⁰ There were rumors, however, that a factor other than simple reasons of economy was involved in the cancellation. Senator Harry F. Byrd of Virginia, the brother of Admiral Byrd, had apparently angered President Truman by insisting upon economy in the government; and the President, unable to retaliate directly against the Senator, allegedly obtained his revenge by cancelling the expedition which was to be headed by the latter's brother.⁶¹

Thus, as had occurred in 1941, the United States abrupt-

⁵⁸"Admiral Byrd Plans an Expedition of 3,500 Men to Antarctica for Navy," The New York Times, August 3, 1949, p. 1.

⁵⁹"Antarctic Expedition Is Deferred by Navy," The New York Times, August 17, 1949, p. 1.

⁶⁰Ibid., p. 1.

⁶¹See, for example, Siple, 90° South, p. 81.

ly ceased operations in Antarctica for what were primarily reasons of economy and internal politics. This disengagement, however, was destined to be short-lived. Eight months after the cancellation of Operation Highjump II, the United States again became urgently concerned with its Antarctic position. This renewal of concern was due to a claim to rights and interests in the Antarctic made by the Soviet Union.

As previously stated, the Russian navigator, Captain Fabian von Bellingshausen, circumnavigated the Antarctic Continent during his expedition of 1819-1821 and may have been the first to sight the mainland. This had been the only Russian activity in the Antarctic up to 1949, with the exception of whaling and oceanographic operations conducted in sub-Antarctic waters after World War II. The United States therefore did not believe that the Soviet Union had significant interests in the Antarctic and did not invite the Soviet Government to participate in the discussions of 1948.

In response to the Soviet omission from the discussions, the President of the All-Soviet Geographic Society, L. S. Berg, prepared a paper entitled "Russian Discoveries in the Antarctic and Present-day Interest in that Area," which he

presented at a meeting of the Society in February, 1949.⁶² After discussing the matter, the Society resolved that the activities of early Russian explorers had established the "indisputable right of the Soviet Union to participate in the solution of problems of the Antarctic."⁶³ In regard to the character of the discussions initiated by the United States in 1948, the resolution continued:

The problems of the Antarctic must be solved primarily by those states that have the historical right to participate in this solution. However, according to reports in the foreign press, certain states are attempting to secure a solution of problems of the Antarctic without the participation of the Soviet Union. The Geographic Society of the U. S. S. R. cannot but register a most decisive protest against this.⁶⁴

Sixteen months later, the Soviet Union sent a memorandum stating the Soviet position on the Antarctic to all the nations which had been involved in the discussions--with the exception of Chile, whose diplomatic relations with the Soviet Union had been broken in 1948. In reference to the discussions of 1948, the Soviet Union stated that it could not agree to "such a question as that of the Antarctic being

⁶²Peter A. Toma, "Soviet Attitude towards the Acquisition of Territorial Sovereignty in the Antarctic," *American Journal of International Law*, Vol. 50 (July, 1956), p. 625.

⁶³Resolution of the All-Soviet Geographic Society, February 10, 1949, in *Ibid.*, p. 626.

⁶⁴*Ibid.*, p. 626.

settled without its participation."⁶⁵ The Soviet memorandum then enumerated the alleged bases of Soviet rights and interests in the Antarctic and concluded with an expression of Soviet willingness to consider proposals on the matter of sovereignty over Antarctic territory.

With this manifestation of interest in the Antarctic on the part of the Soviet Union, coupled with the recent failure of the proposals for international arrangements, the United States again decided to conduct studies on its claims position. Since the mass of data on previous American operations in the Antarctic still had not been compiled or even examined officially, the Department of State was again faced with the lack of easily available information on the matter. To correct this deficiency, work was begun on an official history of American activities in the Antarctic. At the same time, interdepartmental committees were formed to consider future Antarctic programs, including an expedition to conduct the mapping operations that had been planned for Operation Highjump 11.⁶⁶

Before the United States could take any further action relative to its position in the Antarctic, however, external developments again affected the nature of policy. By

⁶⁵Soviet Memorandum on the Question of the Regime of the Antarctic, June 7, 1950, in Toma, "Soviet Attitude," p. 624.

⁶⁶Siple, *90° South*, p. 88.

1950, many scientists of various nationalities had arrived at the opinion that further progress in the geophysical sciences was being impeded by a lack of world-wide, coordinated effort. This led to a plan to conduct an International Geophysical Year from July 1, 1957, to December 31, 1958, during which time concerted, multinational scientific studies would be made of the earth and its surrounding environment. The International Geophysical Year became the most extensive international scientific undertaking in the history of mankind, involving some 4,000 scientific stations and 30,000 scientists and technicians representing 67 nations of every shade of the political spectrum.⁶⁷

⁶⁷Walter G. Sullivan, "The International Geophysical Year," International Conciliation, No. 521 (January, 1959), p. 295.

THE INTERNATIONAL GEOPHYSICAL YEAR

Although political rivalries had frustrated the development of lasting international arrangements in the Antarctic, there had been several joint scientific efforts in the region prior to 1950. In 1874, scientists from the United States, the United Kingdom, Germany, and France visited Kerguelen Island to observe the transit of the planet Venus across the sun.¹ Eight years later, the United States and eleven other nations joined in the First International Polar Year to conduct research in meteorology, magnetism, astronomy, and the auroras. Although the primary focus of the Year's activities was the Arctic, research stations were established on Cape Horn and South Georgia by France and Germany respectively.²

The first official multinational effort on the continent itself took place in 1929 with the British-Australian-New Zealand Antarctic Research Expedition. The results of this two-year program clearly demonstrated the value of

¹U. S., Department of State, United States Policy and International Cooperation in Antarctica (Washington: United States Government Printing Office, 1964), p. 2.

²International Council of Scientific Unions, Comite Special de l'Annee Geophysique Internationale (CSAGI), Annals of the International Geophysical Year (IGY) (45 vols. to 1969, indeterminate no. of vols. in process, London: Pergamon Press, 1958-1969), Vol. 1, p. 14.

international cooperation in Antarctic science.³ In 1932 the Second International Polar Year was inaugurated, and scientists from 44 nations participated in programs of polar research. United States participation was again confined to the Arctic regions.⁴ During the years from 1945 to 1950, ten nations sent scientific expeditions to the Antarctic, one of these expeditions being the combined Norwegian-Swedish-British Expedition of 1945.⁵ Moreover, there had been a long history of cooperation among separate national expeditions in the field. Recent examples of such cooperation were the joint programs conducted by the Ronne and British Expeditions on Stonington Island and the provision by the United States Government to a French expedition in 1949 of aerial photographs of Adelie Land obtained on Operation Highjump.⁶

The International Geophysical Year (IGY) was born at an informal dinner at the home of an eminent geophysicist, Dr. James A. Van Allen, in Silver Springs, Maryland, on April 5, 1950. In a discussion among the several scientists

³John Hanessian, Jr., International Scientific Cooperation in the Antarctic (New York: American Universities Field Staff, 1962), p. 1.

⁴CSAGI, IGY Annals, Vol. 1, p. 218.

⁵Hanessian, Scientific Cooperation, p. 1.

⁶Walter G. Sullivan, Quest for a Continent (New York: McGraw-Hill, c. 1957), p. 287.

present, Dr. Lloyd V. Berkner, head of the Section on Exploratory Geophysics of the Atmosphere in the Department of Terrestrial Magnetism of the Carnegie Institution, proposed that a Third Polar Year be held during 1957 and 1958. Dr. Berkner maintained that recent advances in scientific instrumentation, coupled with the need for concerted, multinational geophysical observations, made such a program highly desirable at that time, which would fall exactly 25 years after the last Polar Year. In addition, the years 1957 and 1958 would correspond with a maximum level of solar activity. This would enable useful comparisons to be made with the data obtained 25 years earlier, when such activity had been at a minimum.⁷

It was decided by those present at the dinner that Dr. Berkner should present his proposals at the next meeting of the Mixed Commission on the Ionosphere, which he was to attend in Brussels in July. Such mixed commissions are formed by the International Council of Scientific Unions (ICSU) to bring members of its various affiliated unions together on research problems which overlap their respective areas of competence. This particular mixed commission had been composed of members of the International Scientific Radio Union, the International Astronomical Union, and the

⁷CSAGI, IGY Annals, Vol. 1, p. 383.

International Union for Geodesy and Geophysics.⁸ The ICSU itself is a non-governmental body, composed at that time of 13 international scientific unions, with the participation of 45 National Science Academies and equivalent organizations.

At Brussels, the Mixed Commission on the Ionosphere supported the proposal for a Third Polar Year and adopted the following resolution:

That the third International Polar Year be nominated for 1957-1958 and that, in view of the length of time necessary for adequate organization of the complex physical equipment now potentially available, an International Polar Year Commission be appointed in 1951 to supervise planning.⁹

The above resolution was approved by the Executive Board of the ICSU at its meeting in Washington in October, 1951. To initiate planning for the Polar Year, the ICSU decided to form a special committee, composed of members of interested scientific unions. Colonel E. Herbrays of Belgium, appointed Convenor of this committee on May 16, 1952, sent notes to each of the member academies, inviting them to affiliate with the Polar Year and requesting that they form national committees to plan their respective scienti-

⁸CSAGI, IGY Annals, Vol. 1, p. 383.

⁹Ibid., Vol. 1, p. 383.

fic programs.¹⁰ The Soviet Academy of Sciences was not a member of ICSU, but the ICSU believed that the success of the endeavor would be affected to a great degree by the ability to obtain data from the large expanse of Soviet territory. The Soviet Academy was accordingly sent a separate invitation.¹¹

The World Meteorological Organization, which is also not a member of ICSU but whose work has obvious relevance to polar operations, was also invited to participate in the initial planning. This organization believed, along with others, that the need for world-wide geophysical observations was such as to warrant the expansion of the program to include research in other than the polar regions. This idea was approved by the ICSU General Assembly in early October, 1952, and the name of the project was changed to the International Geophysical Year. The special committee which had been formed to plan the Polar Year was officially constituted at this time as the Comité Special de l'Année Géophysique Internationale (CSAGI).¹²

¹⁰CSAGI, IGY Annals, Vol. 1, pp. 383-384.

¹¹Ibid., Vol. 1, p. 384.

¹²Ibid., Vol. 1, pp. 384-385.

NOTE--The name of this committee in French, rather than 'Special Committee for the International Geophysical Year,' was used by all IGY participants, including the United States.

The United States member of ICSU, the National Academy of Sciences, accepted the invitation of the parent body and formed the United States National Committee for the IGY (USNC-IGY) of eminent scientific personnel from government, the universities, and private industry. Under the direction of Dr. Joseph Kaplan of the California Institute of Technology, the USNC-IGY began to plan the specific United States IGY programs.¹³

The first meeting of the Comité Spécial de l'Année Géophysique Internationale was held in Brussels from June 30 to July 3, 1953. The representatives agreed upon provisional recommendations regarding the nature of IGY research in various fields and established May, 1954, as the deadline for the submission of specific national programs. By this time 21 nations, in addition to the United States, had formed IGY committees. No response had been received from the Soviet Union, however, and CSAGI invited its representatives from the World Meteorological Organization and the International Astronomical Union, to which the Soviets did belong, to urge the Soviet Union to affiliate with the IGY and attempt to induce other Communist nations to do so.¹⁴

¹³U. S., Congress, House of Representatives, Committee on Interstate and Foreign Commerce, International Geophysical Year, The Arctic and Antarctica, 85th Cong., 2nd sess., House Rept. No. 1348, Serial No. 12072 (Washington: United States Government Printing Office, 1958), p. 11.

¹⁴CSAGI, IGY Annals, Vol. 2, pp. 1-2.

The United States National Committee for the IGY decided to concentrate its efforts in 13 fields of geophysics: aurora, airglow, cosmic rays, geomagnetism, glaciology, gravity, the ionosphere, longitude and latitude determinations, meteorology, oceanography, seismology, solar activity, and rocket and satellite studies of the upper atmosphere.¹⁵ Subcommittees were established to plan the programs for each discipline and estimate their costs. In addition, three ad hoc committees were formed to consider the programs on a geographic basis for the Arctic, the tropics, and the Antarctic.¹⁶ The latter committee was established in November, 1953, under the chairmanship of Dr. Laurence M. Gould of Carleton College, and denominated the USNC-IGY Antarctic Committee. It had the responsibility of examining the programs in the geophysical disciplines and relating them to an overall Antarctic program.¹⁷

In early 1954, the National Security Council recommended to President Eisenhower that the United States make a major commitment to the IGY. The recommendation was approved, and the National Science Foundation was assigned the task of representing the requirements for funds and equipment

¹⁵House Commerce Committee, IGY, p. 12.

¹⁶Paul Siple, 90° South (New York: G. P. Putnam's Sons, c. 1959), p. 93.

¹⁷House Commerce Committee, IGY, p. 16.

before the legislative and executive branches of the government.¹⁸ By March, 1954, the USNC-IGY had outlined its IGY program, which had been based on the suggestions of hundreds of scientists from various institutions throughout the country.¹⁹ On June 7, President Eisenhower submitted a request to Congress for an appropriation of \$2.5 million to be made to the National Science Foundation for United States participation in the IGY. Two weeks later, the President sent a letter to Dr. Chester I. Barnard, the Chairman of the Foundation's National Science Board, stating:

I am glad to support this undertaking. It is a striking example of the opportunities which exist for cooperative action among the peoples of the world. . . .

I am sure that our participation in this far-reaching effort will very materially strengthen our bonds with the many cooperating nations and make a constructive contribution toward the solution of mutual problems.²⁰

On August 25, Congress passed the Supplemental Appropriations Act of 1955, which included a reduced appropriation of \$2 million for United States participation in the

¹⁸Walter G. Sullivan, "The International Geophysical Year," International Conciliation, No. 521 (January, 1959), p. 272.

¹⁹Ibid., p. 272.

²⁰President to Chairman of National Science Board, June 25, 1954, in Public Papers of the Presidents of the United States: Dwight D. Eisenhower 1954 (Washington: United States Government Printing Office, 1960), pp. 597-598.

IGY.²¹ In 1955 and 1956, Congress passed additional appropriations for IGY activities of \$10 million and \$27 million respectively,²² but these funds were used primarily in the earth satellite program. The National Science Foundation, in cooperation with the USNC-IGY, utilized these three appropriations to grant contracts for scientific research to universities and private institutions and to finance the IGY programs conducted by governmental agencies.

By September, 1954, when the Second CSAGI Conference opened in Rome, the number of nations which had formed IGY committees had increased to 35, still not including the Soviet Union. On the first day of the Conference, however, the Soviet Embassy in Rome informed the delegates that the Soviet Academy of Sciences had accepted the invitation to participate in the IGY and had formed a national IGY committee. The Soviet Embassy further stated that the delegation of Soviet scientists which had observed the General Assembly of the International Union for Geodesy and Geophysics in Rome earlier that month had been appointed to attend the conference of CSAGI.²³

²¹U. S., Statutes at Large, Vol. 68 (1955), p. 818.

²²U. S., Statutes at Large, Vol. 69 (1955), p. 208. "Independent Offices Appropriation Act of 1956;" and U. S., Statutes at Large, Vol. 70 (1957), p. 167. "Second Supplemental Appropriation Act of 1956."

²³CSAGI, IGY Annals, Vol. 1, pp. 392-393.

It is to be noted that the National Academies of Science involved in planning IGY programs had varying degrees of affiliation with their respective governments. Activities, such as the IGY, conducted under the auspices of the International Council of Scientific Unions, however, are supposed to remain on a non-political basis. From the earliest stages of planning, therefore, the ICSU attempted to keep the IGY as free as possible from all political influences. To this end, CSAGI membership was limited to representatives of scientific unions; and although members of national IGY committees attended CSAGI conferences and participated in the discussions, their status was that of observers. In addition, particular IGY programs might be supported by governments, but they were supposed to be designed by scientists. Even though such formal attempts to separate science from politics may have little relevance in actuality, CSAGI was successful in this regard to a remarkable degree--especially considering the significant roles that governmental organs played in the specific scientific projects.

The first open test of the non-political character of the IGY occurred at the Rome Conference, when the chairman of the Soviet delegation, Dr. V. V. Belousov, proposed that representatives of large nations, such as China, India, and the Soviet Union itself, be appointed to the Comité Spécial de l'Année Géophysique Internationale. The President of

CSAGI, Dr. Sydney Chapman of the United Kingdom, replied to the Soviet proposal with a firm reiteration of the basic principle that CSAGI members were selected on functional bases and represented international scientific bodies rather than their respective nations. Dr. Chapman expressed the hope that Soviet nationals would participate in the work of CSAGI, but on behalf of one or more of the scientific unions to which they belonged.²⁴ Two Soviet representatives were eventually included as delegates from the International Union of Geodesy and Geophysics, which the Soviets joined in 1955.

The Rome Conference established the basic philosophy behind the research conducted during the IGY. National programs were to be selected "with a view to solving specific planetary problems of the earth."²⁵ The various national committees were to place especial emphasis on that type of research which demanded the collection of data simultaneously throughout the world and which could be of assistance in understanding long-range geophysical trends. Six areas of the world were selected to receive particular emphasis during the IGY: the Arctic, Antarctic and equatorial regions, and three pole-to-pole meridians. The Conference

²⁴CSAGI, *IGY Annals*, Vol. 2, p. 85.

²⁵*ibid.*, Vol. 2, p. 85.

believed that Antarctica, because of its unique position and its physical characteristics, represented a region of extreme interest to the geophysical sciences; and the Comité Spécial de l'Année Géophysique Internationale therefore resolved that "as many nations as possible undertake geophysical observations in Antarctica during the International Geophysical Year."²⁶ CSAGI appointed an Adjoint Secretary for Antarctica, and the planning and coordination of IGY Antarctic programs were conducted from this point at special Antarctic conferences.

Up to this time, the USNC-IGY Antarctic Committee had been considering the establishment of only one Antarctic station--at Little America where maximum advantage could be taken from previous knowledge and experience. In fact, the Committee believed that it could consider itself fortunate if it were able to obtain governmental support for this effort alone. The Antarctic planning committees that had been formed by the United States in 1950 were still in operation, however, and these groups came to the conclusion that the establishment of a number of American IGY stations in Antarctica could further their own aims of mapping the Continent in preparation for the possible assertion of territorial claims. The Defense Department supported this mapping program and also favored a maximum number of Antarc-

²⁶CSAGI, IGY Annals, Vol. 2, p. 172.

tic stations. The United States National Committee for the IGY therefore found the Defense Department to be much more willing to offer its assistance in the establishment of the stations than had been anticipated. The scientists accordingly found their "appetites whetted" and requests for additional Antarctic stations came pouring in.²⁷

While the Second CSAGI Conference was still in session in Rome, the United States formally announced its intention to participate in IGY activities in Antarctica and stated that it would dispatch a small expedition aboard an ice-breaker, the U. S. S. Atka, to determine the suitability of sites for Antarctic stations and to survey the conditions for their logistic support. Three American stations were projected at this time: one at the South Pole, one at Little America, and one to be located in the interior of Marie Byrd Land in the unclaimed sector. The Atka was also instructed to examine an alternate site on the coast of the Weddell Sea.²⁸

Although the United States Government respected the non-political character of the IGY in the main, its political interest in the Antarctic was such that it could not give the scientists an entirely free hand. On approving

²⁷Siple, 90° South, pp. 95-97.

²⁸"U. S. to Send Party to the Antarctic," The New York Times, October 3, 1954, pp. 1, 26.

American participation in IGY Antarctic programs, President Eisenhower designated the Operations Coordinating Board (OCB) of the National Security Council as the agency with the responsibility for overseeing and coordinating broad United States plans and policies for the region. For assistance in this task, the OCB created an 'Antarctic Working Group' composed of representatives of the government agencies with interests in Antarctic matters.²⁹

Within the United States, only the Department of Defense commanded the equipment, personnel, and experience necessary to establish bases in the Antarctic and provide them with continuing logistic assistance. Accordingly, the President appointed the Secretary of Defense "executive agent for logistic support."³⁰ The direct responsibility was assigned, in turn, to the Department of the Navy. Coordination of the roles of the Navy and the USNC-IGY in Antarctic programs was effected through an Antarctic Office established by the National Academy of Sciences. This office also acted as liaison with the Polar Operations Group of the United States Weather Bureau and assisted in the coordination of United States Antarctic activities with those of other

²⁹Henry M. Dater, "Organizational Developments in the United States Antarctic Program, 1954-1965." *Antarctic Journal of the United States*, Vol. 1 (January-February, 1966), p. 23.

³⁰*ibid.*, p. 21.

nations.³¹

To fulfill its Antarctic responsibilities, the Navy organized a logistic support force under Rear Admiral George J. Dufek, who had served with both the United States Antarctic Service and Operation Highjump. The Navy then commenced field operations with the dispatch of the ice-breaker Atka. On February 1, 1955, the Navy gave formal existence to Dufek's group as the United States Naval Support Force, Antarctica, which was organized as part of the Atlantic Fleet as Task Force 43.³²

During the period of planning for the IGY, political rivalries over the Antarctic had not remained quiescent. In 1952 and 1953, tensions between the United Kingdom and the two Latin American claimants had risen to the point where armed force had been utilized by both sides. A British expedition aboard the vessel, John Biscoe, arrived in Hope Bay off the Palmer Peninsula's Trinity Peninsula on January 30, 1952, to rebuild a weather station which had been destroyed by fire three years before. Earlier that season, an Argentine expedition arrived at Hope Bay and was encamped a few hundred yards from the site of the former British base.

³¹House Commerce Committee, IGY, p. 16.

³²Dater, "Organizational Developments," p. 21; and House Commerce Committee, IGY, p. 32.

On the morning of February 1, the British began to unload supplies from the John Biscoe and were informed by the naval lieutenant in charge of the Argentine base that he had been instructed to prevent them, by force if necessary, from establishing a British base at that location. Ignoring the threat, the British were met at noon by bursts of machine-gun fire over their heads and a group of Argentine riflemen moving in to surround them. Two hours later, the unarmed British were forced into an Argentine launch and returned to the John Biscoe at gunpoint. The captain of the John Biscoe was then informed by the Argentine base leader that the machine-gun fire had been accidental but that any further attempts to unload supplies would be fired upon.³³

Immediately after details of the incident had reached Buenos Aires, consultations were held between the Argentine Foreign Minister and, in the temporary absence of the British Ambassador, the Minister of the British Embassy. Argentina took the position that the base leader had exceeded his instructions but was responsible only for "an excess of zeal in the defense of the national territory of the

³³British Minister in Buenos Aires, Richard Allen, to Argentine Minister of Foreign Relations and Worship, Jeronimo Remorino, February 3, 1952, in "Antarctic Claims-- Diplomatic Exchanges between Great Britain, Argentina and Chile in 1952 and 1953," The Polar Record, Vol. 7 (July, 1954), pp. 213-214.

Republic."³⁴ Neither nation desired a war over the Antarctic, however, and both decided to treat the incident as 'unfortunate.' The Argentine expedition was instructed "to avoid, as far as possible, any action which might prejudice the framework of peace and friendship in which Anglo-Argentine relations have always been conducted,"³⁵ and the British expedition aboard the John Biscoe proceeded with its mission without further hindrance.

The United Kingdom sent a formal note of protest against the actions of the Argentine party at Hope Bay to Argentina on February 3.³⁶ Both this note and the Argentine reply of February 27³⁷ were less harshly worded than past correspondence over less serious incidents, as if both nations had been shocked by the occurrence of violence. The initial shock over the Hope Bay incident apparently had little lasting effect, however, for force was again used in the Antarctic the following year.

³⁴Argentine Minister of Foreign Relations and Worship to British Ambassador in Buenos Aires, Henry B. Mack, February 27, 1952, in "Diplomatic Exchanges in 1952 and 1953," p. 215.

³⁵Ibid., p. 215.

³⁶British Minister in Buenos Aires to Argentine Minister of Foreign Relations and Worship, February 3, 1952, in "Diplomatic Exchanges in 1952 and 1953," pp. 213-214.

³⁷Argentine Minister of Foreign Relations and Worship to British Ambassador in Buenos Aires, February 27, 1952, in Ibid., pp. 214-215.

During the 1952-1953 season, both Argentina and Chile sent expeditions to Deception Island in the South Shetlands, which was already the site of permanent Argentine and British stations. Upon arrival, the two new expeditions began to construct huts on the edge of the airstrip which adjoined the British base. The Acting Governor of the Falkland Islands protested the action to the commander of the existing Argentine base and the leaders of the two newly-arrived expeditions to no avail.³⁸ The British Government then instructed the Acting Falklands Governor to destroy the buildings in question and to arrest and deport their occupants under the Falkland Islands Aliens Ordinance. On February 15, 1953, a British magistrate and several constables of the Falkland Islands Police, backed by a contingent of Royal Marines from the frigate Snipe, dismantled the huts. The Chilean hut was found to be unoccupied at that time, but two Argentines were arrested without resistance. The prisoners were taken to South Georgia three days later and placed aboard an Argentine ship bound for Buenos Aires.³⁹

³⁸British Ambassador in Buenos Aires to Argentine Minister of Foreign Relations and Worship, February 16, 1953, in "Diplomatic Exchanges in 1952 and 1953," pp. 218-219; and British Ambassador in Santiago to Chilean Minister of Foreign Relations, February 16, 1953, in Ibid., pp. 223-224.

³⁹Statement of the British Secretary of State for Foreign Affairs in the House of Commons, February 23, 1953, in Ibid., p. 217.

In one respect the British action had been poorly timed. President Juan Peron of Argentina was currently in Chile on a good-will visit, and the two Latin American nations were thus able to coordinate their responses closely.⁴⁰ Each sent a note of protest to the United Kingdom on the same day, reserving its respective rights in the Antarctic and maintaining that the Rio Pact justified its defense of these rights against the activities of non-hemispheric powers.⁴¹ With the close of the current operating season, however, the crisis diminished. On November 26, 1953, the three nations again declared that they would not send warships south of latitude 60° South for other than the customary reasons relating to peaceful exploration;⁴² and by the 1954-1955 season, they were engaged in planning their IGY Antarctic programs.

Twelve nations decided to participate in Antarctic activities during the IGY on a heretofore unprecedented scale, and one of the tasks of the First CSAGI Antarctic

⁴⁰ Robert D. Hayton, "The 'American' Antarctic," *American Journal of International Law*, Vol. 50 (July, 1956), p. 593.

⁴¹ Acting Argentine Minister of Foreign Relations and Worship to British Ambassador in Buenos Aires, February 20, 1953, in "Diplomatic Exchanges in 1952 and 1953," pp. 220-223; and Chilean Minister of Foreign Relations to British Ambassador in Santiago, February 20, 1953, in *Ibid.*, pp. 224-226.

⁴² "Renewal of Tripartite Antarctic Naval Declarations for Season 1953-54," *The Polar Record*, Vol. 7 (July, 1954), p. 226.

Conference, which opened in Paris on July 6, 1955, was the allocation of sites for scientific stations. This led to a political conflict similar to the one at Rome discussed above. Argentina, Chile, and the United Kingdom saw vital interests at stake in decisions involving the Palmer Peninsula region, and all the scientific delegates became aroused upon discovering that the two Latin American delegations were headed respectively by the Argentine and Chilean Ambassadors in Paris--which appeared to the scientists as an affront to the non-political character of the IGY. The situation was handled firmly, however, by the CSAGI Adjoint Secretary for Antarctica and President of the Conference, Georges Laclavere of France, who stated that political questions had no place in the current discussions.⁴³ This position was accepted by the head of the Chilean delegation, Ambassador J. Rossetti, who then presented the following resolution, which was adopted unanimously:

The Antarctic Conference entirely endorses M. Laclavere's statement of purposes at the opening session, and specifically his affirmation that the over-all aims of the Conference are exclusively scientific.⁴⁴

At the Second Plenary Session, in the afternoon of the

⁴³CSAGI, IGY Annals, Vol. 2, p. 397; and Sullivan, "IGY," p. 320.

⁴⁴CSAGI, IGY Annals, Vol. 2, p. 397.

first day of the Paris Conference, each delegation submitted its plans for the establishment of IGY stations. It was noted that a dense cluster of stations had been projected for the Palmer Peninsula region, primarily by its three claimant nations, for what appeared to be political rather than scientific reasons. President Laclavere questioned "whether it would be possible for several nations to instal [sic] bases in the same region without losing sight of the objectives of the program,"⁴⁵ and it was decided to form a working group to study the matter of relocating stations. The head of the Argentine delegation, Ambassador J. A. de Tezanos Pinto, then informed the Conference that Argentina reserved its rights to sovereignty in certain areas of the Antarctic and, while not opposing the intentions of other nations to conduct IGY programs in its sector, claimed the first right to establish stations in those areas in the event that stations were relocated.⁴⁶ The Argentine statement was apparently ignored by the other participants, and, in the end, the cluster of stations remained in the Palmer Peninsula region, producing some duplication in the IGY scientific effort.

Needless to say, neither Argentina nor Chile was pleased by the attention given to Antarctica during the

⁴⁵CSAGI, IGY Annals, Vol. 2, p. 402.

⁴⁶Ibid., Vol. 2, p. 402.

IGY, and both nations were particularly wary of the increased level of British activity and strong Soviet presence. There was little either nation could do, however, in the face of world scientific and public opinion on the one hand and, on the other, the determination of the Great Powers to make the IGY a success. The only real option available to the Latin Americans, or to any other claimant for that matter, was to carry out as extensive a program as possible in order to maintain their Antarctic claims positions and attempt to influence the course of the IGY in a manner favoring their interests. Consequently, in an attempt to protect their claims positions against the influx of IGY stations, Argentina and Chile presented the following joint reservation at the final plenary session of the Conference:

The Argentine and Chilean delegations give their accord to the recommendations for the co-ordination of existing and new bases, with the proviso that . . . these are temporary measures calculated to achieve the best results of the IGY and adopted in the interests of scientific development, and that these resolutions do not modify the existing status in the Antarctic regarding the relations of the participating countries.⁴⁷

This reservation was accepted by all the delegations and constituted the so-called gentlemen's agreement on the freezing of Antarctic claims positions at their pre-IGY

⁴⁷CSAGI, IGY Annals, Vol. 2, p. 409.

status. By accepting the reservation, the scientists hoped to protect the claimants against an erosion of their positions and the non-claimants against any political repercussions resulting from activities in territory claimed by other nations. Such an agreement, made among scientists who were not officials of their governments but representatives of private scientific organizations, obviously could not bind their respective governments, but the governments tended to respect the agreement, or at least paid lip-service to it, and political frictions in Antarctica during the IGY were diminished as a result.

There were other problems involving station allocation at the Paris Conference. The Soviet delegation announced plans for the construction of three stations, including one at the Pole. The United States delegation had tentatively committed itself to the establishment of a Polar station at the CSAGI Conference in Rome ten months earlier; but the Defense Department had not been certain that the feat would be within its capabilities, and no further planning on the matter had taken place.⁴⁸ President Laclavere, however, was apparently under the impression that the American commitment was of a much firmer nature, for he informed the Soviets that the American offer had already been accepted. The Soviet delegation amicably agreed to accept a point

⁴⁸Siple, 90° South, pp. 98-99.

midway between the Pole and the Australian bases on the coast as a substitute site. Under the circumstances, the United States considered it expedient to at least attempt to construct a station at the Pole.⁴⁹ The other two Soviet bases were also to be located in Australian-claimed territory. The Australians were disturbed about what they considered to be a possible threat to their security but made no public comment on the matter.⁵⁰

The question of mutual logistic support among the various national expeditions was also raised at the Paris Conference. Some delegates proposed that such arrangements be effected by a working committee of scientists, but the majority believed that this question had too many political and financial ramifications to be handled by the Comité Spécial de l'Année Géophysique Internationale. The Conference accordingly resolved that mutual support, other than that afforded in emergency situations, should be the subject of bilateral agreement among the nations concerned.⁵¹

The icebreaker Atka had returned to the United States in March, 1955, and the White House subsequently announced that the Navy would send a major expedition in November

⁴⁹CSAGI, IGY Annals, Vol. 2, p. 415; and Siple, 90° South, p. 99.

⁵⁰Sullivan, "IGY," p. 321.

⁵¹CSAGI, IGY Annals, Vol. 2, pp. 403-404, 414.

to prepare the sites for the American IGY stations in Antarctica. The White House also stated that Admiral Byrd would serve as the direct representative of the Secretary of the Navy and the Chief of Naval Operations and "act in an advisory capacity in the preparation of operational plans and as a consultant in the operational conduct of the expedition."⁵² As commanding officer of the United States Naval Support Force, Antarctica and of Task Force 43, Admiral Dufek would be in charge of "the detailed operational planning and conduct of the expedition and have overall command of the surface and air forces involved, afloat and ashore."⁵³

On October 21, 1955, the Secretary of Defense formally appointed Admiral Byrd Officer-in-Charge, United States Antarctic Programs and charged him with "maintaining effective monitorship over those political, scientific, legislative, and operational activities which comprise the total U. S. Antarctic Program."⁵⁴ Byrd was instructed to report

⁵²White House Press Release, March 28, 1955, in "Plan for Antarctic Expedition," Department of State Bulletin, Vol. 32 (April 18, 1955), p. 644.

⁵³Ibid., p. 644.

⁵⁴Deputy Secretary of Defense Reuben B. Robertson to Byrd, October 21, 1955, in U. S., Department of Defense, Officer-in-Charge, United States Antarctic Programs, Antarctica, the Last Frontier: The Annual Report of the Officer-in-Charge, United States Antarctic Programs--Fiscal Year 1956 (Washington: United States Government Printing Office, 1957), p. 12.

on matters concerning Antarctica to the Secretary of Defense and through him to the Operations Coordinating Board. In addition, Byrd was authorized to form a staff to assist him in his duties, and the resulting Office of Antarctic Programs became the first organization within the United States Government to have the specific responsibility for all phases of United States activity in the Antarctic.⁵⁵

The number of major Antarctic research stations to be established by the United States for IGY activities had now been increased to seven. In addition to those previously planned for Little America, the South Pole, and Marie Byrd Land, these included a Naval Air Facility at McMurdo Sound, Wilkes Station on the coast of Wilkes Land in the Australian claim, Ellsworth Station on the coast of the Weddell Sea in the territory claimed by both Argentina and the United Kingdom, and Hallett Station in Victoria Land, which would be operated jointly with New Zealand.⁵⁶

The Navy conducted two Antarctic expeditions before the official commencement of the IGY on July 1, 1957. The first of these, Operation Deep Freeze I, arrived in the Ross Sea on December 16, 1955. Its primary mission was the construction of the principal American base at Little

⁵⁵Officer-in-Charge, United States Antarctic Programs, Antarctica, the Last Frontier, p. 5.

⁵⁶House Commerce Committee, IGY, p. 21.

America and the Air Facility at McMurdo Sound. The remaining bases were constructed during the next Antarctic summer by Operation Deep Freeze II, whose task was greatly facilitated by the airstrip. During the IGY itself, the stations were resupplied by Operation Deep Freeze III. These 3 expeditions cost 18 American lives and over \$31 million in addition to the salaries for the 3,500 men and the normal operating costs of the ships and aircraft involved.⁵⁷

Operation Deep Freeze I was also responsible for the first open disagreement between the United States Government and the scientists involved in United States IGY Antarctic programs. As previously stated, the Defense Department and the other agencies involved in the United States claims-strengthening program desired to take advantage of the IGY to improve the United States Antarctic claims position, and the Navy's operation order for Deep Freeze I included an objective similar to that of Operation Highjump of the previous decade:

Establishing permanent stations in the Antarctic as requested by competent authority, in support of United States rights in the area.⁵⁸

⁵⁷House Commerce Committee, IGY, pp. 33-35.

⁵⁸U. S., Navy, Operation Plan, Operation Deep Freeze (July 1, 1955), Library of the U. S. Naval Support Force, Antarctica, Washington, D. C. *Italics mine.*

The American scientific community protested against this statement, which it considered a blatant violation of the gentlemen's agreement reached at Paris on the status quo of claims, and was successful in having such statements omitted from future Deep Freeze operation orders.⁵⁹

In any event, the claims-strengthening program did not have long to last. Its participants requested that their mapping program be carried out in conjunction with Deep Freeze II at an estimated cost of \$56 million. President Eisenhower was reluctant to approve an additional expense of this magnitude and requested a clarification of the United States Antarctic commitment from the National Science Foundation. The Director of the Foundation, Dr. Alan Waterman, reportedly informed the President that the United States was committed to IGY programs only. Funds for the mapping project were not included in the next request for appropriations from Congress, and the claims-strengthening program collapsed.⁶⁰

With regard to the Deep Freeze I operation order and also with regard to various issues at the IGY conferences, the scientists were successful in maintaining the non-polit-

⁵⁹Philip C. Jessup and Howard J. Taubenfield, *Controls for Outer Space and the Antarctic Analogy* (New York: Columbia University Press, 1959), pp. 155-156.

⁶⁰Siple, *90° South*, p. 126.

ical character of the IGY in matters of form and procedure, which was of dubious importance. The process of allocating sites for Antarctic stations, however, was eased by the facts that neither the United States nor the Soviet Union saw a vital security or policy interest at stake in the results and that the claimants had no choice but to take whatever comfort they could from the 'gentlemen's agreement' on the status of claims. Cases illustrated below indicate that when important interests were seen to exist by the Great Powers, the scientists were much less successful in obtaining their desires.

At the final plenary session of the Paris Conference, Soviet Delegate Beloussov had raised the question of the aerial mapping of Antarctica. He proposed that the various nations operating in the Antarctic cooperate in the preparation of a map based on the complete photographic coverage of the continent. Since the Paris Conference was to adjourn that morning, discussion of the matter was postponed until the Second CSAGI Antarctic Conference, which opened in Brussels on September 8, 1955.⁶¹ At Brussels, Professor M. Somov outlined the Soviet proposals in more specific terms and requested that the Conference adopt conventions for the preparation of the map.⁶²

⁶¹CSAGI, IGY Annals, Vol. 2, pp. 408-410.

⁶²ibid., Vol. 2, p. 429.

There has always been a lack of coordination in Antarctic cartography, and nations have jealously guarded their work because of its relationship to territorial claims.⁶³ It appeared that while the claimants were willing to accept the existence of temporary scientific stations within their sectors, they objected to other nations engaging in cartographic activity, which could represent a permanent threat to their positions. It was therefore decided at the Conference that "the cartography of Antarctica was not a proper discipline for inclusion within the program of the IGY."⁶⁴

In this case, the two Great Powers simply ignored the wishes of the scientists. When the United States mapping program which had been envisioned for Operation Deep Freeze II was canceled the following year, it was for financial reasons unrelated to the objections of American scientists to what they believed introduced a political element into the IGY. The extensive Soviet cartographic effort conducted in Antarctica during the IGY also seemed to have been unaffected by the decision of the Brussels Conference.⁶⁵

A similar case in which scientists were overruled by

⁶³Hanessian, *Scientific Cooperation*, p. 10.

⁶⁴CSAGI, *IGY Annals*, Vol. 2, p. 249.

⁶⁵Sullivan, "IGY," p. 322.

their governments occurred with regard to the Arctic, a region in which both the United States and the Soviet Union possess a security interest much more vital than that in Antarctica. It was noted by the delegates to the CSAGI Arctic Conference in Stockholm in May, 1956, that little was known of the drifting pack-ice of the Arctic Ocean. The United States delegation then proposed that the United States and the Soviet Union cooperate in mapping the ice. The Soviets demonstrated interest in the plan and made an additional proposal that aircraft of both nations be permitted to travel between Murmansk and Fairbanks in order to better obtain composite photographs of the entire ocean. The delegates at the Stockholm Conference were in accord on the value of these proposals and resolved that "regular aerial photographic traverses of the Arctic Basin be carried out with the objective of securing comprehensive data on sea ice distribution, lead patterns, and degrees of ice concentration."⁶⁶

It was soon discovered, however, that Washington opposed the plan, due allegedly to the recent construction of two Air Force bases in the area, which had been regularly visited by Soviet ferry pilots during World War II. The United States then proposed that Nome be used instead of Fairbanks, but the former city is so close to Siberia

⁶⁶CSAGI, 1GY Annals, Vol. 2, p. 506.

as to be virtually useless to the Soviet effort. Relations between the United States and the Soviet Union soon became strained over the Hungarian and Suez crises; and on November 21 the Soviet Union stated that it needed no help in mapping the Soviet side of the Arctic Ocean and that if the United States were unable to map the American side, the Soviet Union might offer its assistance. With that, the idea died.⁶⁷

A further case of disagreement between the scientists and their governments over the substance of an IGY program occurred with regard to a proposal by the Netherlands IGY committee for a study to be conducted of air movements by means of the injection of radioactive trace elements into the atmosphere. The plan was approved in principle at the Third CSAGI Conference, in Brussels in September, 1955, by the CSAGI Bureau, which stated:

(a) The proposed experiments using radioactive tracers offer in principle an avenue to increased knowledge of transport and mixing in the air and in the oceans.

(b) The IGY would be a specially appropriate time at which to make such experiments, because of the exceptional volume of related data, and the large number of observers during the IGY.⁶⁸

After further consideration in the interim, the plan

⁶⁷Sullivan, "IGY," p. 280.

⁶⁸CSAGI, IGY Annals, Vol. 2, p. 298.

received the formal endorsement of the Fourth CSAGI Conference in September, 1956, in Barcelona.⁶⁹ When a committee met to consider the operational requirements of the study four months later in Utrecht, however, no Soviet delegates were present. Moscow had apparently ruled against Soviet participation over the desires of its scientists. Since the data on air movements would be obtained by means of what was, in effect, nuclear fallout, the Soviet Union, involved at that time in a United Nations Science Committee study on the biological effects of radiation, might have been unwilling to admit that fallout had any beneficial uses.⁷⁰

It must be stated that cases such as the above were by far the exception. For every IGY program which caused political conflict, there were hundreds conducted in a spirit of cooperation and amicability. The Soviet scientific community had apparently shown suspicion at first, due perhaps to its long period of isolation from the West and to the fact that much of the earlier planning for the IGY was conducted without Soviet participation.⁷¹ In any event, the International Geophysical Year was highly suc-

⁶⁹CSAGI, IGY Annals, Vol. 2, pp. 364-366.

⁷⁰Sullivan, "IGY," p. 282.

⁷¹Ibid., p. 331.

cessful.

One of the greatest successes of the IGY was the establishment of Antarctic Weather Central at the United States base at Little America, which provided a clearing house for meteorological information regarding the entire Antarctic region. Meteorologists of various nations served tours of duty there; and this led to further personnel exchanges, such as that involving American meteorologists at the Soviet base, Mirny.⁷²

With regard to the free exchange of scientific data, without which the IGY would have been of little value, it had been resolved at the Third CSAGI Conference that data obtained as a result of IGY programs would be made available to scientists and scientific institutions in all nations.⁷³ It was further decided, for safety and convenience, to establish three World Data Centers, with each to possess a complete set of records--one in the United States, one in the Soviet Union, and the third to be divided among Western Europe, Australia, and Japan. Each national committee was responsible for supplying copies of data obtained from all phases of its IGY programs to one of the three centers,

⁷²House Commerce Committee, IGY, p. 30; and State Department, U. S. Policy, p. 5.

⁷³CSAGI, IGY Annals, Vol. 2, p. 294.

which then supplied copies to the other two.⁷⁴

Data was exchanged in accordance with the decisions of the Comite Special de l'Annee Geophysique Internationale, with one exception. The exception concerned the Soviet unwillingness to exchange satellite data to the degree desired by scientists of other nations.⁷⁵ This remained a sore point all during the IGY and illustrates another case in which a government placed what it considered to be a security consideration over the desires of the scientific community.

The IGY was also extremely successful from an organizational point of view. The work was carried out by the national committees and was coordinated at the international level with a minimum of expense. Funds for the operation of CSAGI, approximately \$100,000 yearly, were obtained primarily from the International Council of Scientific Unions, the United Nations Educational, Scientific, and Cultural Organization, and the United States, Soviet, and British Academies of Sciences.⁷⁶ In the main, the governments fully supported the projects designed by the scientists with the funds and materiel necessary.

⁷⁴CSAGI, IGY Annals, Vol. 2, p. 368.

⁷⁵Sullivan, "IGY," p. 334.

⁷⁶Jessup and Taubenfield, Controls, p. 112.

Within the United States, a remarkable degree of cooperation existed between the Antarctic Committee of the National Committee for the IGY and the Naval Support Force, Antarctica, due in great measure to the personalities and attitudes of the heads of the respective organizations, Dr. Gould and Rear Admiral Dufek. The former attempted to exercise moderation in his requests for logistic assistance, and the latter utilized all the resources at his command to carry out the wishes of the scientists.⁷⁷ In addition, Admiral Dufek was able to obtain the assistance of the other military services whenever necessary.⁷⁸

This level of cooperation also extended to the stations in the field, each of which was manned by two separate units: a civilian scientific staff under the command of a Scientific Leader and a military 'housekeeping' group. The latter was responsible for such tasks as construction, maintenance, communications, food preparation, and the provision of medical services. The USNC-IGY had desired that the scientific leaders exercise overall command of the Antarctic stations, but the Navy succeeded in obtaining a split-command arrangement, whereby the leaders of both groups had authority over their own personnel only and referred any disputes upward through their separate chains

⁷⁷Deter, "Organizational Developments," p. 21.

⁷⁸House Commerce Committee, IGY, p. 31.

of command. In situations involving serious physical danger to the station, however, the military assumed temporary command over all personnel. Differences of opinion did occur at the Antarctic stations, of course, but all disputes referred upward to Dufek and Gould were settled by them without the necessity for recourse to higher authority. Although these command arrangements appear unwieldy, they worked satisfactorily during the IGY and have been continued.⁷⁹

Thus an important success of the IGY was in the clarification of the relationship between scientists and governmental officials. Each of the two groups seemed to achieve a greater appreciation and respect for the problems and goals of the other. In the Antarctic, this marked a definite improvement over the peremptory treatment afforded to civilian scientists on previous United States expeditions. The lessons of the IGY in this regard appear to have borne fruit in the increasing acceptance of technical talks as a prelude to political agreement on international questions of a scientific or technological nature.⁸⁰

The IGY also had important effects on the Antarctic policies of the 12 nations involved, and these effects be-

⁷⁹Siple, *90° South*, p. 129; and Dater, "Organizational Developments," p. 23.

⁸⁰Sullivan, "IGY," p. 334.

came apparent as a result of the successful attempt by American scientists to secure arrangements for the continuance of multinational scientific activities in Antarctica after the end of the IGY.

Discussions regarding the possible extension of IGY programs in the Antarctic began even before the official commencement of the IGY itself. The United States National Committee for the IGY believed that the IGY should be extended for one year in Antarctica in order that maximum scientific advantage might be realized from the present level of training and the large investments that the participating nations were making in equipment, bases, and supply lines. In December, 1956, the USNC-IGY formally inquired of the Comité Spécial de l'Année Géophysique Internationale whether the participating nations and CSAGI itself favored such an extension and, if so, whether a conference might be convened by the CSAGI Adjoint Secretary for the Antarctic to consider the nature of the programs to be conducted during the additional year.⁸¹

Adjoint Secretary Laclavere immediately attempted to obtain the views of the other participants on extending the IGY in Antarctica and circulated his findings in a letter to the 12 national committees on December 23. Comments

⁸¹Executive Director of USNC-IGY to Secretary General of CSAGI, December 6, 1956, in CSAGI, IGY Annals, Vol. 2, pp. 473-474.

on the United States proposal were reported by Laclavere as being "scarce and vague,"⁸² and the majority of the national committees appeared to be opposed to the extension for three principal reasons. First, they doubted that their respective governments would agree to provide the additional funds required. Second, they foresaw difficulties in recruiting personnel, especially since the personnel currently involved in Antarctic operations intended to return home at the end of 1958. Finally, the majority of the national committees feared that an extension of the IGY in Antarctica alone would lead the participants to delay processing the data obtained in other regions of the world and that, in the meantime, enthusiasm over the data would have partly evaporated, resulting in damage to the IGY as a whole. The third objection was perhaps the most telling, for the problem of diminished enthusiasm over data once it had been collected had plagued previous United States Antarctic expeditions. In any event, the USNC-IGY requested that the matter be placed on the agenda of the next (Fourth and final) CSAGI Antarctic Conference, which was to be held again in Paris in June, 1957.⁸³

At Paris, the Executive Director of the USNC-IGY, Dr.

⁸²CSAGI, IGY Annals, Vol. 2, p. 474.

⁸³Ibid., Vol. 2, p. 474.

Hugh Odishaw, stressed the scientific importance of continuing the IGY studies in Antarctica. He pointed out that the major expense connected with Antarctic programs was that involved in the establishment of bases and that the extension of scientific operations at those bases would involve comparatively little additional cost. Dr. Odishaw further informed the delegates that the extension proposal had originated unexpectedly from a USNC-IGY meeting and that no official request for additional funds had as yet been made to the United States Government. Thus the financial position of his national committee was just as uncertain as that of any other; but if Antarctic operations were in fact to be continued into the 1958-1959 season, he believed that the scientists should reach a decision at this time.⁸⁴

Principal opposition to extension came from the (British) Royal Society, whose position on the matter was officially stated at the Conference by the British delegate, Sir David Brunt. The Society believed that there was no question as to the value of additional work in the Antarctic but that it was "no part of the IGY business to get observations over one relatively small part of the whole globe, for which there will be no other observations to compare

⁸⁴CSAGI, IGY Annals, Vol. 2, p. 476.

over other regions."⁸⁵ The Society believed that it would be better to have another global IGY some years hence, after the data from the current one had been properly analyzed, and that if certain nations did wish to continue Antarctic operations in the meantime, they should work out arrangements among themselves.

The position expounded by the British delegate was supported by the delegations of Australia, South Africa, and Chile. The United States proposal received the support of the Belgian, Soviet, and French delegations, although the latter informed the Conference that the French Government had "almost determined not to give any financial support."⁸⁶ The four remaining delegations were uncommitted at that time. It was finally decided that the matter warranted further thought and discussion, and the Conference recommended that "ICSU appoint a scientific committee to examine the merits of further investigations in the Antarctic covering the entire field of science."⁸⁷ The ICSU Executive Board considered the recommendation at its meeting in Brussels on June 27 and decided to form a committee to study the question further. The committee was composed of

⁸⁵CSAGI, IGY Annals, Vol. 2, p. 476.

⁸⁶Ibid., Vol. 2, p. 477.

⁸⁷Ibid., Vol. 2, p. 485.

scientific delegates and met in Stockholm on September 9, 1957.⁸⁸

The consensus at Stockholm was one of opposition to the extension of IGY activities in Antarctica, primarily because of the costs involved; and the proposal appeared doomed--that is, until the Soviet delegate arrived on the second day of the meeting:

The delegate indicated on a map where the Russian Antarctic stations were and where they [the Soviets] wanted to go, said they expected to continue their studies in the Antarctic, and expressed the opinion that while Russia did not wish to influence other countries to go ahead if they did not wish to do so, they felt in such cases new nations should be invited in to carry on the studies.⁸⁹

The statement of the Soviet delegate proved to have far-reaching consequences for Antarctica. Since the majority of the other nations did not wish to give the Soviet Union a free hand in the region, a continuation of international scientific operations was thereby assured. The Stockholm Conference recommended that the International Council of Scientific Unions establish a committee to study the matter of future arrangements.⁹⁰

⁸⁸John Hanessian, Jr., "Antarctica: Current National Interests and Legal Realities," Proceedings of the American Society of International Law, Vol. 52 (1958), p. 149.

⁸⁹House Commerce Committee, IGY, p. 44.

⁹⁰Hanessian, "Antarctica: Interests and Realities," p. 149.

Two weeks later, the ICSU decided to create a Special Committee on Antarctic Research (SCAR) to prepare a plan for the scientific research to be conducted in Antarctica after the IGY. Delegations to SCAR were to be composed of scientists and appointed by ICSU member bodies. Invitations to participate in the work of SCAR were then sent to the 12 national IGY committees involved in Antarctic programs.⁹¹ Now it was up to the respective governments to decide if they wished to provide the necessary funds.

In November the Committee on Interstate and Foreign Commerce of the United States House of Representatives commenced a study on the achievements of the IGY in the Arctic and Antarctica and the direction and magnitude desired with regard to post-IGY programs of the United States in the polar regions. The Committee justified its concern on the basis of the legislative jurisdiction that it exercised over questions relating to civil aviation, communications, weather, science in general, and the National Science Foundation in particular.⁹²

As a result of its study, the Committee concluded that "the IGY was one of the most important undertakings and could have the most far-reaching implications of any science-

⁹¹Hanessian, "Antarctica: Interests and Realities," p. 149.

⁹²House Commerce Committee, IGY, pp. 1-3.

tific work we have anywhere at this time."⁹³ The science of geophysics was seen to have relevance to all of man's major activities and to be of particularly crucial importance to transportation, communication, and agriculture. The Committee therefore believed that the United States must continue to engage in the type of research embodied in the IGY. With specific regard to Antarctica, the Committee supported the position of the USNC-IGY regarding the further utilization of the scientific stations which had been established during the IGY, stating:

Once established, the cost of maintenance is low; abandoned, the cost of re-establishment and rehabilitation is high. We believe that the scientific stations in the Antarctic should be continued.⁹⁴

Although the Committee was of the expressed belief that scientific considerations were adequate in themselves to justify continued United States operations in the Antarctic, it maintained that Soviet intentions, as stated at Stockholm, made such operations imperative.⁹⁵

The Committee expressed an awareness of the difficulties inherent in a program that combined private direction

⁹³House Commerce Committee, IGY, p. 41.

⁹⁴Ibid., p. 44.

⁹⁵Ibid., pp. 44-45.

and funds with governmental financing and logistic support. It saw a need for further study on whether a continuing program should be financed through one direct appropriation each year rather than through the current procedure of utilizing several indirect appropriations but found itself satisfied in the main with the present arrangements under the direction of the National Academy of Sciences. The Committee therefore recommended that the Academy form a committee to outline future Antarctic programs and their budgetary requirements. This recommendation was communicated to the President of the Academy, Dr. Detlev Bronk, by the House Commerce Committee Chairman, Representative Oren Harris of Arkansas, in a letter of January 13, 1958. Dr. Bronk replied on January 24, stating that he was forming an Academy Committee on Polar Research under Dr. Gould.⁹⁶

The Committee also commended the logistic support afforded by the military under Admiral Dufek and stated that the military should continue to fulfill this responsibility. It noted, however, that the Naval Support Force, Antarctica, had not been receiving as modern equipment as, in the opinion of the Committee, the importance of its task warranted. In the words of the Committee Report:

⁹⁶House Commerce Committee, 16Y, p. 43.

Indeed, in a measure there is an appearance of some of our obsolete military equipment being written off by having been relegated to them.⁹⁷

On the basis of all the above considerations, the House Commerce Committee made the following recommendations, which were communicated to President Eisenhower by Chairman Harris on January 17:

We recommend that it straightaway be decided that our activities in the Antarctic will continue for another year, that the National Science Foundation prepare a budget for additional funds enabling it to continue to act as fiscal agent for the scientific studies, and that the National Security Council authorize and direct the Defense Department to furnish logistic support.⁹⁸

The President immediately approved the recommendations, and, on January 24, the Committee was informed by the Director of the National Science Foundation, Dr. Alan T. Waterman, that the United States would definitely continue scientific operations in the Antarctic after the IGY and that the Navy Department was instructing Admiral Dufek to make the necessary preparations.⁹⁹

On the international level, the newly-created Special Committee on Antarctic Research met at The Hague on Febru-

⁹⁷House Commerce Committee, IGY, p. 47.

⁹⁸Ibid., p. 45.

⁹⁹Ibid., p. 45.

ary 3 and decided to encourage as many nations as possible to continue or expand their current programs of Antarctic research. Once it had become apparent that both the Soviet Union and the United States would continue operations in the Antarctic, the 10 other nations soon decided that they would follow suit, albeit on somewhat reduced scales. At the Stockholm meeting of the International Council of Scientific Unions, the British delegate had stated flatly that the Royal Society was against the extension of IGY activities in the Antarctic. By the time of the first SCAR meeting, however, the interest demonstrated by the Great Powers had caused the British to relent somewhat, and they indicated the possibility of continued scientific operations in the Antarctic.¹⁰⁰

Australia was extremely concerned over the Soviet decision to remain in the region, inasmuch as all the Soviet IGY stations were located in Australian-claimed territory. Australia had traditionally attempted to protect itself against any possible security threats from the south, and it was at Australian insistence that the 1951 Peace Treaty with Japan had contained a clause by which the latter renounced "all claim to any right or title to or interest in

¹⁰⁰Hanessian, "Antarctica: Interests and Realities," pp. 150, 157.

connection with any part of the Antarctic area."¹⁰¹ The apparent Soviet permanence in Antarctica now caused the Australians to decide to continue work at at least one of their Antarctic stations.¹⁰²

There is little doubt that one of the most significant effects of the IGY upon Antarctic politics was the corresponding penetration of the Continent by the Soviet Union. A polar nation itself, the Soviet Union was highly interested in Antarctic research, and the IGY had presented it with the opportunity to work in Antarctica with a minimum of political difficulties with the claimant nations. Soviet scientists were among the most ardent proponents of a formal extension of the IGY and apparently expected little difficulty in obtaining the necessary funds on the basis of the Kremlin's original decision in favor of Soviet participation in IGY Antarctic programs. In contrast, most of the scientists from Western nations doubted their ability to obtain government financing for programs as formal and extensive as those currently being undertaken.¹⁰³

A compromise was reached between the Soviet scientists

¹⁰¹U. S., Department of State, "Treaty of Peace with Japan," United States Treaties and Other International Agreements (Washington: United States Government Printing Office, 1952), Vol. 3, p. 3172.

¹⁰²Hanessian, "Antarctica: Interests and Realities," p. 153.

¹⁰³Sullivan, "IGY," p. 327.

and their Western colleagues at the Fifth, and final, CSAGI Conference in July, 1958, in Moscow. The delegates agreed to end the IGY on December 31 as previously envisaged and to conduct "International Geophysical Co-operation 1959," utilizing the Special Committee for Antarctic Research and similar committees which had been formed to coordinate research in other areas, such as the oceans and outer space.¹⁰⁴

While the scientists were thus attempting to obtain conditions favorable to a continuation of the scientific programs of the IGY, the United States Government was making an attempt to maintain the current political climate in Antarctica through international arrangements. Unlike the two previous United States attempts at internationalization, however, this one would prove successful.

¹⁰⁴"Extension of I. G. Y. Activities into 1959," The Polar Record, Vol. 9 (January, 1959), p. 345.

THE ANTARCTIC TREATY

The United States had attempted to obtain agreement on international arrangements for Antarctica in 1948 partly through a desire to extricate itself from the difficult position in which the Anglo-Argentine-Chilean claims rivalry had placed it. Now, 10 years later, the United States was beginning to find itself in a similar position, but between different antagonists--Australia and the Soviet Union.

According to an article in The (London) Times of February 7, 1957, the United States Government had been informed some time before of Australian concern over Soviet intentions in the Antarctic. The Australian Government hoped that the Soviet Union would be cooperative in exchanging data obtained in the Antarctic and in withdrawing upon the completion of the International Geophysical Year, but it reportedly feared that the Soviet interest in Antarctic oceanography could be related to plans for the establishment of a submarine base.¹ As Soviet intentions to remain in Antarctica became increasingly apparent during 1957, Australia began to press the United States to render assistance in ousting the Soviets. The Australians were interested primarily in gaining United States recognition of

¹"Russian Base in Antarctic: Australian Concern," The Times (London), February 7, 1957, p. 7.

its Antarctic claims, arguing that without such recognition, Australia would find it virtually impossible to counter a Soviet refusal to vacate its bases once the IGY were concluded.²

In September, 1957, as a result of both the Australian pressures and a desire not to see the Antarctic situation deteriorate to the condition of the late 1940's and early 1950's, Secretary of State Dulles requested Ambassador Paul C. Daniels to conduct a detailed study of the United States position in the Antarctic with an eye toward finding a solution to the current political problems.³ Secretary Dulles had no specific proposals in mind at that time, desiring only that such a solution achieve a reasonable level of stability in the Antarctic without unduly jeopardizing United States relations in other areas of the world. The reconciliation of these two criteria, however, had been previously impossible to obtain.

Ambassador Daniels organized a team of State Department personnel, which spent the next eight months in consul-

²John Hanessian, Jr., "Antarctica: Current National Interests and Legal Realities," Proceedings of the American Society of International Law, Vol. 52 (1958), p. 153.

³Much valuable information concerning this period of United States involvement with the Antarctic was gained through conversations with Ambassador Paul C. Daniels, alternate United States representative to the International Conference on Antarctica.

tation with members of other government agencies. It was decided that the most practicable solution to the problems of the Antarctic, consonant with the best interests of the United States, would be the conclusion of a treaty guaranteeing the free access of scientists to all parts of the region and insuring the utilization of the region for peaceful purposes only. Accordingly, on May 2, 1958, the United States sent a note to the 11 other nations currently involved in IGY Antarctic programs, inviting them to participate in a conference on Antarctica. The note, drafted by Ambassador Daniels, discussed the value of the cooperative research currently being conducted in the Antarctic and stressed the need for agreement on arrangements which would allow that work to continue. Such arrangements, in the opinion of the United States, could have the further advantage of "preventing unnecessary and undesirable political rivalries in that continent, the uneconomical expenditure of funds to defend individual national interests, and the recurrent possibility of international misunderstandings."⁴ The United States proposed that the above goals could best be obtained through the conclusion of a treaty, which would have the following specific purposes:

⁴United States Invitation to Twelve-Nation Antarctic Conference, May 2, 1958, in U. S., Department of State, United States Policy and International Cooperation in Antarctica (Washington: United States Government Printing Office, 1964), pp. 23-24.

A. Freedom of scientific investigation throughout Antarctica by citizens, organizations, and governments of all countries; and a continuance of the international scientific cooperation which is being carried out so successfully during the current International Geophysical Year.

B. International agreement to ensure that Antarctica be used for peaceful purposes only.⁵

In addition, the note traced the history of American operations in the Antarctic and reserved "all of the rights of the United States with respect to the Antarctic region, including the right to assert a territorial claim or claims."⁶ It was the opinion of the United States, however, that the proposed treaty would not have to require the renunciation by any nation of whatever rights or claims to sovereignty it might possess in the region:

It could be specifically provided that such basic rights and such claims would remain unaffected while the treaty is in force, and that no new rights would be acquired and no new claims made by any country during the duration of the treaty. In other words, the legal status quo in Antarctica would be frozen for the duration of the treaty, permitting cooperation in scientific and administrative matters to be carried out in a constructive manner without being hampered or affected in any way by political considerations.⁷

⁵United States Invitation to Twelve-Nation Antarctic Conference, May 2, 1958, in Department of State, United States Policy, p. 24.

⁶Ibid., p. 24.

⁷Ibid., pp. 24-25.

The 11 nations accepted the United States proposals in principle, but the State Department believed that it would be useless to hold a formal conference before basic agreement had been reached on certain crucial points, specifically those regarding free scientific access, the status of claims, and demilitarization under a reliable system of inspection. In June, therefore, the team under Ambassador Daniels began weekly preparatory talks with representatives of the 11 embassies in Washington. By March, 1959, a consensus had been reached on only those matters relating to scientific access, joint research programs, and the utilization of the Antarctic for peaceful purposes only. Within the next few weeks, however, enough basic agreement had been reached on other issues to warrant the calling of the formal conference.⁸

The International Conference on Antarctica opened in Washington on October 15, 1959. The official United States representative and head of the United States delegation was Mr. Herman Phlegar of the State Department. Ambassador Daniels and Mr. George H. Owen, also of the Department of State, served as alternate representatives. The Defense Department was represented in the delegation by Captain Eugene W. Davis, United States Navy. Advisers to the United

⁸Department of State, United States Policy, p. 9.

States delegation included a committee of seven scientists, appointed by the National Academy of Sciences at the request of the State Department, and Senators Frank Carlson of Kansas and Gale McGee of Wyoming.⁹

The United States delegation to the Antarctic Conference sought to obtain four major objectives through the prospective treaty: (1) the prevention, under a reliable system of inspection, of the utilization of Antarctica for other than peaceful purposes, (2) the continuance of scientific research in Antarctica under the freest possible conditions, (3) the reduction of claims controversies and the accompanying political tensions, and (4) the establishment of a system of continuing consultation among the governments of nations "actively engaged in scientific investigation in Antarctica."¹⁰ During the course of the negotiations, the United States delegation operated from detailed position papers, which had been prepared in collaboration with all the governmental departments and agencies with interests in Antarctic affairs. Whenever the delegation found it necessary to deviate from these recorded positions, the approval of the agencies concerned was obtained before the

⁹U. S., Congress, Senate, Committee on Foreign Relations, Hearings on the Antarctic Treaty, 86th Cong., 2nd sess., June 14, 1960 (Washington: United States Government Printing Office, 1960), pp. 37-38.

¹⁰Ibid., pp. 44-45.

United States agreed to the item in question. In addition, throughout the negotiations there was daily consultation between the two governmental agencies most directly concerned with Antarctic matters, the Departments of State and Defense.¹¹

It had been realized in Washington at the outset that the major obstacle to the success of the conference would be the position of the two Latin American claimants. Public opinion in Argentina and Chile was such that the two nations could not accept any arrangement that had the appearance of diluting their respective 'sovereignties' in the Antarctic.¹² It had therefore been politically impossible to propose any permanent solutions to the Antarctic claims problem; and it had been necessary to suggest an arrangement, similar to that which had worked so well on an informal basis during the IGY, under which the legal status of Antarctic claims would be 'frozen.' The Argentine delegation, however, still had misgivings regarding the level of internationalization that its counterparts might attempt to obtain. At the opening of the Conference the chairman of that delegation, Dr. Rodolfo Scilingo,

¹¹Senate Foreign Relations Committee, Antarctic Treaty Hearings, pp. 37, 71.

¹²Walter G. Sullivan, "The International Geophysical Year," International Conciliation, No. 521 (January, 1959), p. 326.

firmly stated the sine qua non of further Argentine participation:

This Conference . . . has not been convened to institute regimes or create structures. It is not its mission to change or alter anything. Nothing that is done here will give rise to, affect, or disregard rights. The objective of this Conference is to reach an agreement, with the expressed concurrence of all the parties, upon the peaceful use of and scientific cooperation in the Antarctic With that clear understanding, Argentina will take part in the work with a sincere desire to cooperate.¹³

It was clear that the successful conclusion of the Antarctic Conference was dependent on the central problem of developing an arrangement which would insure maximum freedom for scientific investigation while, at the same time, satisfying the claimant nations with regard to the status of their 'sovereignities' over Antarctic territory. Indeed, during the period of planning for the IGY most of the claimants had taken steps toward binding their Antarctic claims more securely to the national administrative hierarchy.

In 1954 Australia, through the passage of the Antarctic Territory Bill, arranged for the application to its Antarctic sector of the laws of the Australian Capital

¹³U. S., Department of State, "The Conference on Antarctica," International Organization and Conference Series, No. 13 (September, 1960), p. 31.

Territory.¹⁴ The following year, France removed its Antarctic sector from the authority of the Governor General of Madagascar and constituted it as a separate colony under the name, French Southern and Antarctic Territories.¹⁵ In 1956, the Statute of the Chilean Antarctic Territory established the Chilean sector as an integral part of Magallanes Province.¹⁶ On February 28, 1957, an Argentine Presidential Decree administratively combined Tierra del Fuego and various adjacent islands with the Argentine Antarctic sector and "re-established" the National Territory of Tierra del Fuego, Antarctica, and the Islands of the South Atlantic, with its capital at Ushuaia.¹⁷ Finally, on June 21, 1957, the Norwegian civil and criminal codes were extended to Queen Maud Land by Royal Proclamation.¹⁸

Moreover, it was soon discovered at the Antarctic Conference that the level of agreement on the question of free

¹⁴R. A. Swan, *Australia in the Antarctic* (Melbourne: University of Melbourne Press, 1961), p. 275.

¹⁵John Hanessian, Jr., *The Claimant Nations* (Part 2, *National Activities and Interests in Antarctica*, 3 parts, New York: American Universities Field Staff, 1962), p. 14.

¹⁶*ibid.*, p. 12.

¹⁷Argentine Decree-Law No. 2191, February 28, 1957, in *The Polar Record*, Vol. 9 (January, 1958), pp. 52-53.

¹⁸Norwegian Royal Proclamation, June 21, 1957, in "Administration of Norwegian Territories in the Antarctic," *The Polar Record*, Vol. 9 (May, 1958), p. 160.

scientific access was not as high as had been believed during the preliminary discussions. Fears were now being expressed within Latin America that this question could be related to a desire on the part of the Great Powers to test nuclear weapons in a region far removed from their metropolitan territories.¹⁹ Since the winds tend to blow constantly northwards from the Pole, any fallout from a nuclear explosion would be carried from Antarctica and deposited in particularly high concentrations upon Argentina and Chile, the two nearest nations.²⁰ Concern over the possible testing of nuclear weapons in Antarctica had preoccupied the Latin Americans all during the IGY, under which such activity had not been precluded. For unknown reasons, however, this subject had not been introduced at the preliminary discussions, and it became the only really new matter to be considered at the formal conference. On November 20, the Argentine delegation made a formal proposal to bar all nuclear explosions and disposal of radioactive wastes from the Antarctic Continent and adjacent islands. This was accepted by the other delegations, and a major obstacle to

¹⁹"Los Intereses de la Argentina en la Zona Antartica," La Prensa (Buenos Aires), November 4, 1959, p. 5.

²⁰Senate Foreign Relations Committee, Antarctic Treaty Hearings, pp. 40, 42.

final agreement was thereby removed.²¹

The success of the Antarctic Conference was aided primarily by the existence of factors which had not been present during the two previous attempts by the United States to obtain an international agreement regarding Antarctica. The first and perhaps most important such factor was the Soviet penetration of Antarctica. Soviet IGY bases had been established in the Australian claim, and Soviet expeditions had ranged all over the continent. In neither case had the Soviet Union requested the permission of claimants or indicated in any other way that it attached any validity to the existing claims to Antarctic territory.²² The Soviet activities had greatly increased the receptiveness of the United Kingdom and the other Commonwealth claimants to plans for international arrangements. In the past these nations had feared that such steps might lead to Soviet involvement; but now that the Soviet presence in Antarctica appeared to have a permanent nature, international arrangements seemed the only manner in which Soviet activities could be controlled.²³

The second factor, which led all the nations to have

²¹"Uso Pacífico del Atomo en la Antartida," *La Prensa* (Buenos Aires), November 20, 1959, p. 2.

²²Senate Foreign Relations Committee, *Antarctic Treaty Hearings*, p. 40.

²³Sullivan, "IGY," p. 324.

an interest in seeing that agreement was reached, was the ample proof of the value of international scientific cooperation in the Antarctic that had been afforded by the IGY. Through such cooperation and the concurrent free exchange of scientific data, each nation was able to reap benefits far in excess of those attainable through the expenditure of its own resources alone; and the continuance of these arrangements under a treaty offered particular benefits to the three smaller non-claimants: Belgium, Japan, and South Africa.

Belgium claimed an interest in Antarctic matters on the basis of its expedition of 1897-1899, which spent a year beset in the ice aboard its vessel, Belgica. The Belgian Expedition thus became, albeit inadvertently, the first to winter-over in the Antarctic. The Belgian Government had asserted no territorial claims and had refused to grant funds for further expeditions prior to the IGY. Unwilling to commit resources to a permanent effort in the Antarctic, Belgium favored international arrangements as enabling Belgian scientists to participate more freely in the expeditions of other nations.²⁴

Inasmuch as Japan had been compelled to renounce all

²⁴John Hanessian, Jr., The Nonclaimant Nations (Part 3, National Activities and Interests in Antarctica, 3 parts, New York: American Universities Field Staff, 1962), pp. 17-18.

rights to Antarctic claims in 1951, the Japanese delegation to the Antarctic Conference supported the United States proposals as affording the best opportunity to maintain Japanese access to the region.²⁵

The United States proposals also offered particular advantages to South Africa, whose formal claims, as asserted in 1948, were limited to the sub-Antarctic Marion and Prince Edward Islands. South Africa's primary interest in the Antarctic regions is meteorology, and studies conducted at a weather station on Marion Island had indicated a need for an expanded program of observations. The proposals for international arrangements were seen by South Africa as facilitating its desires to continue the work on the Antarctic Continent that it had begun during the IGY. In fact, one month after the Treaty was signed, South Africa was granted possession of the IGY station in Queen Maud Land which had been evacuated by Norway for lack of funds.²⁶

The success of the United States in gaining final acceptance of its proposals was also aided by the support that these proposals enjoyed among all major international scientific organizations and by the fear that the failure of these negotiations would cause adverse reactions in the

²⁵Hanessian, *Nonclaimant Nations*, p. 20.

²⁶Hanessian, *Claimant Nations*, p. 28.

world political situation and be a bad precedent for future such negotiations.²⁷

In addition, a major effort was made at the Antarctic Conference to accommodate the position of the claimants. No attempt was made to force the relinquishment of territorial claims nor even to create some type of centralized administrative organ. In the final analysis, however, the claimants faced the same lack of alternatives that had existed with regard to the IGY. Although they may have feared with good reason that the level of international controls obtained through the Treaty might lead to greater steps in this direction at a later time, the claimants had little choice but to accept.

One cause of the failures of the previous proposals for the internationalization of Antarctica had been the reluctance of the United States to exert pressure on the claimants over an issue of secondary importance to its global interests. Another cause had been the corresponding belief held by the claimants that the United States would not act peremptorily against their Antarctic interests. The Soviet Union, however, had no such compunctions--the claimants were not its allies--and the claimants seemed

²⁷"Llegaran a un Acuerdo sobre la Antartida," La Prensa (Buenos Aires), November 1, 1959, p. 1.

fully aware of this fact. Moreover, observers at the Antarctic Conference reported that if the Conference did fail, there was a strong likelihood that both the Soviet Union and the United States would change their traditional policies and enter the claims race themselves.²⁸ While there is no evidence that direct threats in this regard were made by either nation, the possibility was probably made clear to the claimants at the Conference.

The Antarctic Treaty was signed on December 1, 1959, and consists of a preamble and 14 articles. It basically represented the highest common denominator of possible areas of agreement, affording no final solution to the political problems of the Antarctic.

Article 1 reserves the Antarctic regions for peaceful purposes only. Specifically prohibited are "any measures of a military nature, such as the establishment of military bases and fortifications, the carrying out of military maneuvers, as well as the testing of any type of weapons."²⁹ In recognition, however, of the vital roles played in Antarctic operations by military forces of all nations,

²⁸"Sexta Semana de Deliberaciones en la Conferencia Antartica de Washington," La Prensa (Buenos Aires), November 22, 1959, p. 1.

²⁹U. S., Department of State, "The Antarctic Treaty," United States Treaties and Other International Agreements (Washington: United States Government Printing Office, 1961), Vol. 12, pt. 1, p. 795.

Article 1 excepts from the above prohibition "the use of military personnel and equipment for scientific research or for any other peaceful purpose."³⁰

The question of demilitarization afforded the negotiators few problems for the primary reason that, unlike other areas of the world regarding which similar attempts had been and would be made, Antarctica had never been 'militarized' in the first place except for isolated instances of naval forces in adjacent waters.³¹ The Great Powers had demonstrated little interest in establishing military bases in Antarctica, and the smaller nations had tended to be deterred from doing so by the costs involved. All the delegations were therefore satisfied with arrangements that insured that the region could not be used as a base for hostile operations directed against their nations.

Articles 2 and 3 attempt to promote the continuance of the international scientific cooperation that existed during the IGY. Freedom of scientific investigation was established in the Antarctic, and the Contracting Parties agreed to engage in specific conduct designed to aid cooperative research, including exchanges of data, information

³⁰"The Antarctic Treaty," United States Treaties, Vol. 12, pt. 1, p. 795.

³¹Howard J. Taubenfeld, "A Treaty for Antarctica," International Conciliation, No. 531 (January, 1961), p. 302.

on plans and programs, and scientific personnel.³²

Article 4 effectively freezes the legal status of claims to sovereignty over Antarctic territory, stating:

No acts or activities taking place while the present Treaty is in force shall constitute a basis for asserting, supporting, or denying a claim to territorial sovereignty in Antarctica or create any rights of sovereignty in Antarctica. No new claim, or enlargement of an existing claim, to territorial sovereignty in Antarctica shall be asserted while the present Treaty is in force.³³

Article 4 further states that nothing in the Treaty shall be interpreted as a renunciation or diminution of any claim, right, or basis of a claim or right to territorial sovereignty in the Antarctic. Neither is the Treaty to have any effect upon the recognition or non-recognition by any Party of a claim or right of another.

The ban on certain nuclear activities is contained in Article 5, which expressly prohibits "any nuclear explosions in Antarctica and the disposal there of radioactive waste."³⁴

Article 6 defines the region over which the Treaty shall be in force as "the area south of 60° South Latitude, including all ice shelves" and further states that "nothing

³²"The Antarctic Treaty," United States Treaties, Vol. 12, pt. 1, pp. 795-796.

³³Ibid., Vol. 12, pt. 1, p. 796.

³⁴Ibid., Vol. 12, pt. 1, p. 796.

in the present Treaty shall prejudice or in any way affect the rights, or the exercise of the rights, of any State under international law with regard to the high seas within that area."³⁵ This article presented a particular problem to the negotiators, inasmuch as the claimants accepted varying definitions of precisely what constituted territorial waters. In addition, there was no consensus on whether ice shelves should be considered as land or water for legal purposes. The delegations at the Conference wished to avoid controversy over these points, and the article was purposely worded in a manner that left them undecided but served the purposes of the Treaty.³⁶

While the United States delegation did not wish to impair any nation's rights on the high seas, it did insist upon a system of inspection that could protect all the Parties against violations of the Treaty, particularly with regard to the article concerning demilitarization. The United States believed that any such system, to be reliable, should include the right to inspect vessels in the process of embarking and/or discharging personnel and equipment in the Treaty Area.³⁷ The specific right to inspect vessels

³⁵"The Antarctic Treaty," United States Treaties, Vol. 12, pt. 1, p. 797.

³⁶Senate Foreign Relations Committee, Antarctic Treaty Hearings, p. 66.

³⁷Ibid., p. 66.

engaged in such activity was conferred on all signatories in Article 7, which dealt with inspection procedures.

The United States had expected serious difficulties in obtaining agreement to the inclusion in the Treaty of a reliable system of inspection. The Defense Department believed that the right of overflight in itself constituted "a very effective inspection system,"³⁸ and the United States would probably have accepted this right alone if it had failed to obtain agreement on a more comprehensive system. In fact, little opposition to inspection was encountered among the other delegations. Some favored the creation of a multinational organ, but the Latin Americans opposed any such steps, which they considered to be leading toward a system of international administration. In any event, the United States insisted upon a unilateral system as more likely to be effective.³⁹

In the negotiation of the Treaty, and especially with regard to Article 7, the United States delegation was particularly interested in insuring that "no right granted by the treaty was subject to any approval by any other party in order to be exercised,"⁴⁰ thus hoping to forestall

³⁸Senate Foreign Relations Committee, Antarctic Treaty Hearings, p. 67.

³⁹*Ibid.*, p. 67.

⁴⁰*Ibid.*, p. 56.

any future situations in which activities under the Treaty could be obstructed by the veto of one or more signatories. As defined in Article 7, the right of inspection under the Antarctic Treaty is both unilateral and unlimited. Each nation is to keep the others apprised of the identity of its official observers, and these personnel "shall have complete freedom of access at any time to any or all areas of Antarctica . . . including all stations, installations and equipment within those areas, and all ships and aircraft at points of discharging or embarking cargoes or personnel in Antarctica."⁴¹ To increase both the reliability and the ease of the inspection process, each of the Parties is required to give advance notice to the other Parties of all Antarctic expeditions conducted by its nationals or its vessels or organized on its territory, all Antarctic stations to be occupied by its nationals, and all plans for the introduction of military personnel or equipment for peaceful purposes as authorized in Article 1.

In order to further insure the effectiveness of the provisions granting free access to scientists and observers, Article 8 provides that such personnel and their staffs shall, anywhere in the Antarctic, be subject only to their

⁴¹"The Antarctic Treaty," United States Treaties, Vol. 12, pt. 1, p. 797.

national jurisdiction.⁴² This article represented a concession by the claimants, all of which have civil and criminal codes which they claim to be effective within their sectors. The concession was of only a partial nature, however, in that Article 8 refers explicitly to scientists and observers only. Persons not in one of these two categories receive no immunity under the Treaty from the jurisdiction of a claimant state, as illustrated in the following hypothetical case presented by Mr. Phlegar at the hearings on the Treaty before the Foreign Relations Committee of the United States Senate:

If we send a scientist or an inspector into the sector claimed by Chile, he cannot be arrested by Chile . . . but if there should be a mining engineer who went down into the sector claimed by Chile and he got into some trouble, Chile would claim that its laws governed.

We would claim that Chile's law did not govern because we do not recognize Chile's claim, and there would be an international controversy as to who had jurisdiction over the individual.⁴³

Article 9 provides for regular meetings of consultation among representatives of the original signatories for the purpose of considering and recommending to their respective governments "measures in furtherance of the prin-

⁴²"The Antarctic Treaty," United States Treaties, Vol. 12, pt. 1, pp. 797-798.

⁴³Senate Foreign Relations Committee, Antarctic Treaty Hearings, p. 62.

ciples and objectives of the Treaty."⁴⁴ Any nation subsequently adhering to the Treaty is able to participate and vote in these meetings only if it "demonstrates its interest in Antarctica by conducting substantial scientific research activity there, such as the establishment of a scientific station or the despatch of a scientific expedition."⁴⁵

In Article 10, the Parties agreed to "exert appropriate efforts, consistent with the Charter of the United Nations, to the end that no one engages in any activity in Antarctica contrary to the principles or purposes of the Present Treaty."⁴⁶

Article 11 concerns procedures for the settlement of any disputes that may arise with regard to the Treaty. The United States and eight of the eleven other participants desired that nations unable to resolve such disputes peacefully among themselves be compelled to submit them to the International Court of Justice, whose decision would be binding on the parties concerned. The United States delegation, in particular, believed that such an arrangement would be vital to the enforcement of demilitarization in addition to affording a forum in which the facts of each case could be ascertained. The delegations of Argentina, Chile, and

⁴⁴"The Antarctic Treaty," United States Treaties, Vol. 12, pt. 1, p. 798.

⁴⁵Ibid., Vol. 12, pt. 1, p. 798.

⁴⁶Ibid., Vol. 12, pt. 1, p. 799.

the Soviet Union, however, were adamant in their refusal to agree to compulsory Court jurisdiction, and the majority was forced to relent.⁴⁷ The article, as finally drafted, states that parties to a dispute with regard to the Treaty shall first seek resolution through peaceful means of their choice and that, if a settlement is not thereby achieved, they shall submit the dispute to the International Court of Justice with the consent of all parties concerned.⁴⁸

The Antarctic Treaty is to be of indefinite duration, and Article 12 provides that the Treaty may be amended through the unanimous consent of the original signatories plus that of any later adherents that have achieved the right to participate and vote in the meetings of consultation. After 30 years--a period of time which represented a compromise among the desires of the various delegations--from the date that the Treaty enters into force, any voting adherent may request a conference to consider modifications or amendments to the Treaty, which can then be effected by majority decision. If any such amendment or modification fails to be ratified by any Party within a period of two years, then: (1) that Party is deemed to have with-

⁴⁷Senate Foreign Relations Committee, Antarctic Treaty Hearings, pp. 63, 69.

⁴⁸"The Antarctic Treaty," United States Treaties, Vol. 12, pt. 1, p. 799.

drawn from the Treaty and (2) any other Party may withdraw from the Treaty two years after having communicated such intention.⁴⁹

The final two articles discuss ratification and accession procedures and the authenticity of texts. Accession to the Treaty is open to any member of the United Nations and to any other nation with the unanimous consent of voting parties. The Treaty would enter into force upon its ratification by all signatories.⁵⁰

Quite significantly, the Treaty contains no provisions with regard to the economic development of the Antarctic or with regard to free access to the region for purposes other than scientific investigation and official inspection. Thus the discovery of exploitable wealth could easily lead to conflict. This is hardly a valid criticism of the Treaty itself, however, or of the United States delegation at the Conference. It would have been highly unrealistic to expect the claimant nations to freely relinquish their claims to sovereign rights over a territory whose value is not known and will probably remain unknown for years. For the United States and the four other non-claimants to have insisted upon such relinquishment would have been to jeopard-

⁴⁹"The Antarctic Treaty," United States Treaties, Vol. 12, pt. 1, pp. 799-800.

⁵⁰Ibid., Vol. 12, pt. 1, p. 800.

ize the entire Treaty. This precise point was discussed by Dr. Laurence M. Gould, formerly the chairman of the Antarctic Committee of the United States National Committee for the IGY, at the hearings on the Treaty:

My profession is geology, and I would not give a nickel for all the mineral resources I know in Antarctica. The point is we do not know, and to predicate a program or to assume that vast resources are there is nonsense. We have not examined 1% of the area geologically So that for many, many years to come, maybe as many as 30 years, the most important export of Antarctica is going to be its scientific data, and that is terribly important indeed.⁵¹

In the Antarctic Treaty, the United States attained the primary goals of its Antarctic policy as determined through the interdepartmental discussions and position papers prior to the Antarctic Conference. In attaining these goals, moreover, the United States relinquished no right that it had exercised prior to the conclusion of the Treaty. If the United States were to attempt to exploit some future source of wealth in Antarctic territory claimed by another nation, there would undoubtedly be a conflict between it and the claimant; but this is, of course, the same situation that would exist without the Treaty.

The same can be said regarding the lack of enforce-

⁵¹Senate Foreign Relations Committee, Antarctic Treaty Hearings, p. 75.

ment procedures and the failure to achieve agreement on the compulsory submission of disputes to the International Court of Justice. The United States maintains that if it came to believe that the Treaty were violated, it would be released from its own obligations and again be in no worse position than before.⁵²

Hearings on the Antarctic Treaty commenced in the Committee on Foreign Relations of the United States Senate on June 14, 1960. In recommending that the consent of the Senate be granted to ratification, President Eisenhower stated:

This is a unique and historic treaty. It provides that a large area of the world . . . will be used for peaceful purposes only. It contains a broad, unrestricted inspection system to ensure that the nonmilitarization provisions will be carried out. . . .

I believe that the Antarctic Treaty is a significant advance toward the goal of a peaceful world with justice.⁵³

Opposition to the Treaty centered not so much on its specific provisions, deficiencies in which have been discussed above, but rather on the United States policies that led up to its conclusion. It was believed by some senators, notably by Clair Engle of California and Ernest Gruening

⁵²Senate Foreign Relations Committee, Antarctic Treaty Hearings, p. 42.

⁵³Ibid., p. 1.

of Alaska, that the United States should have formally asserted an Antarctic claim and have sought the removal of the Soviet presence rather than having concluded an agreement with the Soviet Union that, in fact, legitimized that presence. As stated by Senator Engle:

In essence, we are settling [sic] the seal of free world recognition on the Soviet presence in Antarctica in return for whatever assurance the treaty offers that the Soviets will not be trouble-makers.⁵⁴

Speaking in favor of the Treaty and the policies upon which it had been based were Dr. Gould, Mr. Phlegar, Philip C. Jessup, the Hamilton Fish Professor of International Law at Columbia University, and Rear Admiral David M. Tyree, United States Navy, who had succeeded to the position held by Admiral Dufek. With regard to the assertion of an Antarctic claim by the United States, it was pointed out to the Committee that there were only two possible courses of action: the United States could restrict its claim to the unclaimed sector, the least valuable region of the continent, or it could challenge the claims of other nations, all of which were partners of the United States in defense alliances. In the latter case there were no assurances that the other claimants would submit the resulting dispute

⁵⁴Senate Foreign Relations Committee, Antarctic Treaty Hearings, p. 2.

to peaceful settlement, and in neither case would the Soviets be excluded from the continent. Moreover, the Soviet Union would probably respond to a United States claim with the assertion of a claim of its own.⁵⁵

The Soviet Union had adopted the position of the United States regarding Antarctic claims and had made it perfectly clear over the preceding decade that it would not accept any arrangement concerning Antarctica that had been effected without its consent. This would certainly include any agreement between the United States and the claimant nations aimed at Soviet exclusion from the continent. The alternatives open to the United States at that time with regard to the presence in the Antarctic of the Soviet Union were succinctly stated by Mr. Phlegar in the following interchange with the chairman of the Committee, Senator J. W. Fulbright of Arkansas:

CHAIRMAN FULBRIGHT: Could we have not placed limitations on Soviet activity in Antarctica without entering into this arrangement with the Soviet [sic] as partners?

MR PHLEGAR: I know of no other way than going down there and trying to throw them out.⁵⁶

In any event, the United States did not possess pre-

⁵⁵Senate Foreign Relations Committee, *Antarctic Treaty Hearings*, pp. 47, 51.

⁵⁶*Ibid.*, pp. 66-67.

dominant rights over the entire Antarctic Continent. Other nations enjoyed histories of Antarctic operations equal to or more extensive than its own, particularly in the Palmer Peninsula region. If the United States wished to achieve recognition of a territorial claim or claims, it would be forced to concede the rights of other nations in certain other areas and thus to cease exercising the right of free access to the entire region--all of this to no apparent advantage.⁵⁷

On August 10, 1960, the Senate advised ratification of the Antarctic Treaty by a vote of 66 to 21. Eight days later, the United States became the fifth nation to ratify the Treaty. On June 23, 1961, the final three nations, Argentina, Chile, and Australia, deposited their instruments of ratification, and the Treaty entered into force on that date.⁵⁸

The Antarctic Treaty was responsible for establishing several precedents in the history of international relations. The Treaty was the first to prohibit nuclear explosions in any area of the world and to contain a system of inspection adequate to insure compliance. In addition, the Treaty represented the first agreement in history to

⁵⁷Senate Foreign Relations Committee, Antarctic Treaty Hearing, pp. 39-40, 52.

⁵⁸Department of State, United States Policy, p. 26.

devote a large area of the world to peaceful purposes, again under a comprehensive inspection system. Finally, it was the first agreement to provide free access for scientific investigation over a considerable portion of the globe.⁵⁹

The Treaty would thus appear to offer important lessons for future international agreement regarding such issues as disarmament, nuclear testing, and outer space. One point, however, must be kept in mind, particularly during the later discussion on the relevance of the Antarctic experience to other areas: the Treaty did prohibit certain types of activities in the Antarctic, but these activities were not ones in which any nation was currently engaged. Neither did it promote any activities that were not currently being conducted. In essence, the Treaty simply formalized the situation that had existed in the Antarctic during and immediately prior to the International Geophysical Year and attempted to insure that the situation would continue for at least 32 years.

This is not to imply, however, that the signatory nations would have necessarily continued to abstain voluntarily from those activities which were expressly prohibited by the Treaty. Indeed, if the Treaty had not been concluded,

⁵⁹Senate Foreign Relations Committee, Antarctic Treaty Hearings, p. 45.

one can wonder whether the United States would be transporting the waste materials from its nuclear reactor at McMurdo Sound outside the Antarctic regions for disposal or whether the French Government might have considered Adelie Land as a more suitable site for the testing of nuclear weapons than that utilized in the Tuamotu Archipelago.

The significance of the Antarctic Treaty would be proved to lie not only in its stated provisions, however, but also in the political climate which it successfully maintained. Aided by the reduction of tensions over the Antarctic, agreement would be reached at the Meetings of Consultation during the 1960's on issues where agreement was inconceivable before. Thus whatever the deficiencies in the Treaty itself, the course of later events would amply demonstrate the astuteness of the negotiators in not jeopardizing the entire Treaty by insisting upon arrangements which could not be the subject of unanimity at that time and, instead, establishing a mechanism for continuing consultation.

THE ERA OF COOPERATION: 1960-1969

The programs conducted under the International Geophysical Year had been, by definition, of limited scope and fixed duration. Therefore, once the United States had decided to continue operations in Antarctica on an indefinite basis, both the government and the scientific community were forced to devise new arrangements more suitable to a permanent effort involving constantly changing scientific objectives.¹

Upon the death of Admiral Byrd in 1957, the position of Officer-in-Charge, United States Antarctic Programs, had been assigned to Rear Admiral George J. Dufek, who retained his original position of Commander, United States Naval Support Force, Antarctica. The record of cooperation achieved by Dufek and Dr. Laurence M. Gould, the chairman of the Antarctic Committee of the United States National Committee for the IGY, had effectively eliminated the need for Byrd's position as a general overseer of Antarctic programs below the level of the Operations Coordinating Board, and the Defense Department believed it best that Byrd's other responsibilities be combined with those of the Con-

¹Henry M. Dater, "Organizational Developments in the United States Antarctic Program, 1954-1965," *Antarctic Journal of the United States*, Vol. 1 (January-February, 1966), p. 25.

mander of the Support Force.²

Dufek received orders in February, 1958, directing him to continue to provide logistic support for Antarctic operations after the completion of the IGY, and he immediately began studies on the manner in which this task might be fulfilled more economically on a permanent basis. It was subsequently decided to abandon Wilkes and Ellsworth Stations and concentrate American activities in the Ross Sea Region, thus enabling the United States to use a single supply line through the Naval Air Facility at McMurdo Sound. Little America Station, although of great sentimental value to the United States, was deemed to be unnecessary to the Antarctic programs envisaged for the future, and it was also abandoned.³ The meteorological role fulfilled by Antarctic Weather Central at Little America was assigned to the newly-created International Antarctic Anal-

²U. S., Congress, House of Representatives, Committee on Interior and Insular Affairs, Subcommittee on Territorial and Insular Affairs, Hearings on Deep Freeze 1963-64 Operations, 88th Cong., 2nd sess., May 28 and August 10, 1964, Serial No. 29 (Washington: United States Government Printing Office, 1964), p. 18; and Dater, "Organizational Developments," p. 25.

³U. S., Congress, House of Representatives, Committee on Interior and Insular Affairs, Subcommittee on Territorial and Insular Affairs, Hearings on Antarctica Legislation--1961, 87th Cong., 1st sess., August 24-25, 1961, Serial No. 11 (Washington: United States Government Printing Office, 1962), pp. 59-60.

ysis Center in Melbourne, Australia.⁴

The United States offered to loan the abandoned stations, along with most of their equipment, to any nation or nations which would undertake to maintain and support them and agree to allow American scientists to conduct research there. These terms were accepted by Australia and Argentina with regard to Wilkes and Ellsworth Stations respectively, and these nations were granted custody in February, 1959.⁵ An interesting legal problem developed with regard to the manner in which the United States could transfer real estate in two locations where it recognized no jurisdiction but where the two recipients respectively claimed sovereignty. A solution was reached when the claimants agreed to sign simple receipts stating that they had received such property and equipment and would return it on demand.⁶

To further facilitate its logistic effort in Antarctica, the United States signed an agreement with New Zealand on December 24, 1958. Under its terms, the United

⁴U. S., Department of State, United States Policy and International Cooperation in Antarctica (Washington: United States Government Printing Office, 1964), p. 8.

⁵House Territorial and Insular Affairs Subcommittee, Hearings on Antarctica Legislation--1961, p. 60; and Dater, "Organizational Developments," p. 27.

⁶Dater, "Organizational Developments," p. 27.

States was permitted to establish an operational headquarters and advanced staging base for the Antarctic in New Zealand in return for the provision of logistic services "as far as possible" for New Zealand Antarctic operations.⁷ On October 18, 1960, this agreement was extended "to remain in force for the full period during which United States personnel, ships, and aircraft continue in future to be based in New Zealand in connection with United States operations in Antarctica."⁸

The three United States Antarctic research stations at which operations would continue were Amundsen-Scott at the South Pole, Byrd in Marie Byrd Land, and Hallett, which would continue to be operated jointly with New Zealand. Each of these stations was located within 800 air miles of the main staging and supply base at McMurdo Sound, which, in turn, was located 2,200 miles from what became the advanced headquarters at Christchurch, New Zealand.

All these Antarctic stations had been constructed during the IGY and designed for temporary use, and the first

⁷U. S., Department of State, "Operations in Antarctica Agreement of 24 December 1958," United States Treaties and Other International Agreements (Washington: United States Government Printing Office, 1958), Vol. 9, pp. 1502-1509.

⁸U. S., Department of State, "Operations in Antarctica Agreement of 18 October 1960," United States Treaties and Other International Agreements (Washington: United States Government Printing Office, 1961), Vol. 2, pt. 2, p. 2206.

specific task facing the Navy in the field was their rehabilitation and, in some cases, complete reconstruction. Also desired were the installation of improved aids to aerial navigation and the construction of airstrips at the two inland stations to eliminate the need for airdrops, which had frequently caused damage to equipment. The transition to permanent Antarctic facilities commenced in the fall of 1959 with Operation Deep Freeze 60 under Rear Admiral David M. Tyree, who had succeeded to the positions of Commander, United States Naval Support Force, Antarctica, and Officer-in-Charge, United States Antarctic Programs upon the retirement of Admiral Dufek the preceding April.⁹

The Navy had meanwhile become interested in the small nuclear reactors being developed by the Army to generate power for bases in isolated regions.¹⁰ The use of nuclear power in the Antarctic appeared to offer immediate savings over conventional fuels, the cost of transporting which totaled 60 percent of the expenditures for Antarctic logistic support, and the Navy began to prepare a site for a

⁹U. S., Congress, House of Representatives, Committee on Interior and Insular Affairs, Subcommittee on Territorial and Insular Affairs, Hearings on Deep Freeze 1962 Operations, 87th Cong., 2nd sess., May 25, 1962, Serial No. 23 (Washington: United States Government Printing Office, 1962), pp. 2-3.

NOTE--Since 1959, the names of the annual Operations Deep Freeze have corresponded with the fiscal year.

¹⁰Dater, "Organizational Developments," p. 29.

reactor at McMurdo Station during the 1960-1961 season.¹¹ The reactor was delivered to Antarctica in December, 1961, and achieved criticality on March 4, 1962. Two years of testing were required before the reactor was accepted by the Navy, but it currently (1969) supplies a major portion of the power required at the base.¹²

Also in 1961, the Committee on Polar Research of the National Academy of Sciences completed a two-volume study of long-range Antarctic research objectives. The recommendations of the Academy were translated by the National Science Foundation into a five-year plan for Antarctic programs, involving specific locations, personnel, and costs, which was then coordinated with a similar five-year plan developed by the Navy for logistic support.¹³ The Foundation also undertook to prepare yearly plans for submission to the Navy, which included the specific logistic requirements

¹¹U. S., Congress, House of Representatives, Committee on Interior and Insular Affairs, Subcommittee on Territorial and Insular Affairs, Hearings on Antarctica Legislation--1960, 86th Cong., 2nd sess., June 13-14, 1960, Serial No. 27 (Washington: United States Government Printing Office, 1960), pp. 45-46.

¹²U. S., Congress, Senate, Committee on Public Works, Staff Report on United States Operations in Antarctica, 89th Cong., 2nd sess. (Washington: United States Government Printing Office, 1966), p. 6.

¹³House Territorial and Insular Affairs Subcommittee, Hearings on Antarctica Legislation--1961, pp. 20-21; and House Territorial and Insular Affairs Subcommittee, Hearings on Deep Freeze 1963-64 Operations, pp. 91-92.

for operations during the year in question. In the 1961-1962 season the Navy, at the scientists' request, began construction of a new station at the base of the Palmer Peninsula. Subsequently named Eights Station in honor of Dr. James Eights, the first American scientist to visit the Antarctic, it was designed primarily for high-altitude research. The station was evacuated in November, 1965, but may be reopened.¹⁴

Meanwhile, a movement was progressing within the United States Congress toward the establishment of a separate, centralized agency to assume full responsibility for the coordination of United States plans and programs for the Antarctic. This movement had commenced in 1955, when in his letter of appointment as Officer-in-Charge, United States Antarctic Programs, Admiral Byrd had been assigned the additional duty of assisting the Defense Department in "the development of necessary legislative programs, including the establishment in concert with the other departments of the government of a permanent unit for Antarctic activity."¹⁵ Immediately prior to his death, Byrd began

¹⁴Department of State, United States Policy, p. 15; and Senate Public Works Committee, Report on United States Operations in Antarctica, p. 8.

¹⁵Deputy Secretary of Defense to Byrd, October 21, 1955, in U. S., Department of Defense, Officer-in-Charge, United States Antarctic Programs, Antarctica, the Last Frontier: The Annual Report of the Officer-in-Charge, United States Antarctic Programs--Fiscal Year 1956 (Washington: United States Government Printing Office, 1957), n. 12.

to develop plans for an independent executive agency which would have full responsibility within the government for all matters relating to the Antarctic. In such a way, he hoped to eliminate the lack of continuity that had plagued the United States Antarctic effort in the past.¹⁶

On March 18, 1957, seven days after Byrd's death, the Defense Department submitted a legislative proposal for the establishment of an Antarctic Commission to the Bureau of the Budget. On April 27, Senator Alexander Wiley of Wisconsin requested the Defense Department to assist him in drafting a bill which would also create an Antarctic Commission, similar in structure to the Atomic Energy Commission, which would be named after Admiral Byrd. The Department of Defense complied, and the Deputy United States Antarctic Projects Officer, Dr. James E. Mooney, was assigned the task of assisting Senator Wiley.¹⁷ The bill received the bi-partisan co-sponsorship of 23 senators and was introduced by Senator Wiley on May 31, 1957. It was then referred to the Committee on Labor and Public Works, where

¹⁶Deputy United States Antarctic Projects Officer to Chairman, House Subcommittee on Territorial and Insular Affairs, June 24, 1960, in House Territorial and Insular Affairs Subcommittee, Hearings on Antarctica Legislation--1960, pp. 50-51.

¹⁷House Territorial and Insular Affairs Subcommittee, Hearings on Deep Freeze 1963-64 Operations, p. 45.

it received no hearings and no further consideration.¹⁸

In an attempt to achieve more interest in his bill, Senator Wiley addressed the Senate on January 27, 1958, appealing to United States nationalism and fears of Soviet encroachment. Dissatisfied with the emphasis on science in current United States Antarctic programs, Wiley listed as vital concerns other than scientific research: (1) determining the United States position on territorial claims, (2) deterring the Soviet Union from gaining control over "strategic areas," (3) capitalizing on mineral deposits and "strategic values," and (4) maintaining the Drake Passage as an open waterway in case the Panama Canal were destroyed.¹⁹

Two days later, Senator Wiley re-introduced his bill. An identical bill was introduced in the House of Representatives on June 30 by Representative Clement J. Zablocki, also of Wisconsin.²⁰ The bills proposed that a Richard E. Byrd Antarctic Commission be established in the executive department for the following purposes:

¹⁸U. S., Congressional Record, 85th Cong., 1st sess., Vol. 103, pt. 6 (May 31, 1957), pp. 8130-8135.

¹⁹U. S., Congressional Record, 85th Cong., 1st sess., Vol. 104, pt. 1 (January 27, 1958), pp. 1032-1034.

²⁰House Territorial and Insular Affairs Subcommittee, Hearings on Antarctica Legislation--1960, p. 18.

To provide for continuity and support of study, research and development of programs for peaceful uses in science, commerce, and other activities related to Antarctica, which shall include, but shall not be limited to, gathering, evaluating, correlating, and dispersing of information and knowledge obtained from exploration, research, and other mediums relating to weather, communications, travel, and other areas of information; also to coordinate Antarctic activities among those agencies of the United States Government and private institutions interested in or concerned directly with the promotion, advancement, increase, and diffusion of knowledge of the Antarctic; and to direct and administer United States Antarctic programs in the national interest.²¹

Specific functions of the proposed Commission would include: (1) maintaining a depository of records concerning the Antarctic, (2) conducting expeditions and supervising the conduct of expeditions by other government agencies, (3) assisting private expeditions in programs of Antarctic research "when such assistance is in the best interests of the United States," and (4) disseminating information relating to the Antarctic.²²

The Commission would be headed by a Director and two Deputy Directors appointed by the President with the advice and consent of the Senate. To assist the Commission, the President would also appoint a Board of Governors of eleven men, four of whom were to be from civilian life and the

²¹House Territorial and Insular Affairs Subcommittee, Hearings on Antarctica Legislation--1960, p. 2.

²²Ibid., pp. 2-3.

remaining seven to include the Director of the Commission and representatives of the Departments of State, Defense, Commerce, and the Interior, the National Science Foundation, and the National Academy of Sciences.²³

On June 13 and 14, 1960, while hearings on the Antarctic Treaty were being held in the Senate Foreign Relations Committee, the Subcommittee on Territorial and Insular Affairs of the House Committee on Interior and Insular Affairs held hearings both on the Zablocki Bill and on a bill which had been introduced by Representative L. Mendel Rivers of South Carolina. The latter sought to assign the overall responsibility for Antarctic matters to the Department of Defense, proposing that the Secretary of Defense should "undertake and carry out a program to provide for the continuity, expansion, support, and development of scientific and other activities relating to Antarctica."²⁴

These bills were opposed by all the executive departments and independent agencies which submitted reports on the proposed legislation, including the Department of Defense. These departments and agencies maintained that present arrangements for the coordination of Antarctic activities were operating in a satisfactory manner and that

²³House Territorial and Insular Affairs Subcommittee, Hearings on Antarctica Legislation--1960, pp. 3-4.

²⁴Ibid., p. 10.

an independent Antarctic commission was unnecessary and could produce duplication of effort.²⁵ With regard to the Rivers Bill, it was generally believed within the United States Government that assigning the full responsibility for Antarctic programs to the Defense Department would be contrary to the spirit of the Antarctic Treaty.²⁶ Moreover, President Eisenhower had recently directed the Bureau of the Budget to study the governmental organization for United States Antarctic programs and, as a result of this study, had concurred in the opinion of the executive departments.²⁷ The President's decision was made just prior to the Subcommittee hearings; and thus even the Defense Department had reported unfavorably on both bills. With the opposition of the executive branch and the general lack of

²⁵Under Secretary of the Interior to Chairman, House Interior and Insular Affairs Committee, June 10, 1960, in House Territorial and Insular Affairs Subcommittee, Hearings on Antarctica Legislation--1960, pp. 5-6; Assistant Secretary of State to Chairman, House Interior and Insular Affairs Committee, June 8, 1960, in *Ibid.*, pp. 6-7; Assistant General Manager, Atomic Energy Commission, to Chairman, House Interior and Insular Affairs Committee, June 7, 1960, in *Ibid.*, p. 7; and General Counsel, Department of Defense, to Chairman, House Interior and Insular Affairs Committee, June 13, 1960, in *Ibid.*, pp. 9-10.

²⁶See, for example, Assistant General Manager, Atomic Energy Commission, to Chairman, House Interior and Insular Affairs Committee, June 7, 1960, in *Ibid.*, p. 7.

²⁷General Counsel, Department of Defense, to Chairman, House Interior and Insular Affairs Committee, June 13, 1960, in *Ibid.*, p. 9.

interest in the matter on the part of Congress, no further action was taken on the proposed legislation.

On August 13, 1960, the Director of the Bureau of the Budget, Maurice H. Stans, sent a circular to the heads of the executive departments and independent agencies with interests in Antarctica. On the basis of the study approved earlier by the President, the circular formally assigned responsibilities and established general policies for the planning and conduct of United States Antarctic programs in the post-1GY years.

In the Budget Bureau circular, the National Science Foundation was authorized to assume the "principal coordinating and management role in the development and carrying out of an integrated United States scientific program for Antarctica."²⁸ During the International Geophysical Year, this responsibility had been vested in the National Academy of Sciences and its United States National Committee for the IGY for the reason that the Academy was the United States member body of the International Council of Scientific Unions, under whose auspices the IGY had been conducted. The Academy had a purely advisory role within the United States Government, however, and was not equipped

²⁸Bureau of the Budget Circular No. A-51, August 3, 1960, in House Territorial and Insular Affairs Subcommittee, Hearings on Antarctica Legislation--1961, p. 17.

to manage programs that were now primarily unilateral and most likely permanent. The National Science Foundation, on the other hand, had been previously authorized by law to perform functions which made it admirably suited to act as the coordinating body for United States Antarctic programs on a continuing basis. These functions included:

- (1) initiating and supporting basic scientific research,
- (2) coordinating its research programs with those of other government agencies, and (3) cooperating in multinational research programs.²⁹

Other government agencies with interests in Antarctic matters were requested to assist the National Science Foundation by appointing representatives to an Antarctic advisory committee and by informing both the Foundation and the Defense Department of any proposals for inclusion in the United States program. The participation of the United States in multinational programs was also to be arranged and coordinated by the Foundation, in consultation with the Department of State. Finally, the Foundation was directed to "serve as the clearinghouse and source of information regarding the existence and location of Antarctic records."³⁰

²⁹U. S., Statutes at Large, Vol. 64 (1952), pp. 149-154. "National Science Foundation Act of 1950."

³⁰Bureau of the Budget Circular No. A-51, August 3, 1960, in House Territorial and Insular Affairs Subcommittee, Hearings on Antarctica Legislation--1961, p. 17.

Under the Budget Bureau directive, the Department of Defense retained the responsibility for planning and conducting operations in support of Antarctic programs. The Commander, United States Naval Support Force, Antarctica, continued to serve as the senior United States representative in Antarctica and was charged with "determining the feasibility of, and insuring the success and safety of, Antarctic operations while making all reasonable efforts to provide the support necessary to fulfill the objectives of the Antarctic programs."³¹

The Operations Coordinating Board continued to exercise the ultimate responsibility for coordinating the "totality of Antarctic activities" and reviewing the annual plans for Antarctic operations.³² The budgetary requirements for future Antarctic programs would be planned and represented before Congress by the National Science Foundation, which was authorized to allocate funds to government agencies and award grants and contracts to private institutions for the conduct of Antarctic research. Logistic support continued to be funded by the Department

³¹Bureau of the Budget Circular No. A-51, August 3, 1960, in House Territorial and Insular Affairs Subcommittee, Hearings on Antarctica Legislation--1961, p. 17.

³²Ibid., p. 17.

of Defense.³³

At the subsequent request of the National Science Foundation, the Committee on Polar Research of the National Academy of Sciences undertook the task of advising the Foundation of the views of the scientific community regarding the content of Antarctic research.³⁴

On February 19, 1961, the Operations Coordinating Board and its Antarctic Working Group were abolished by Executive Order in the general reform of the National Security Council conducted by the Kennedy Administration. The Council, with its various boards, staffs, and interdepartmental committees, had apparently become extremely cumbersome by 1961, and President Kennedy wished to obtain a greater level of compactness and flexibility in both the Council and its attendant machinery.³⁵

Upon signing the order abolishing the Operations Coordinating Board, President Kennedy stated that the State Department would henceforth coordinate the efforts of the

³³Bureau of the Budget Circular No. A-51, August 3, 1960, in House Territorial and Insular Affairs Subcommittee, Hearings on Antarctica Legislation--1961, pp. 17-18.

³⁴Dator, "Organizational Developments," p. 25.

³⁵Arthur M. Schlesinger, Jr., A Thousand Days: John F. Kennedy in the White House (Boston: Houghton Mifflin, 1965), pp. 209-210.

United States in relation to a particular country or area.³⁶ Subsequently directed to assume the responsibility for overall coordination of United States activities in the Antarctic, the State Department created a Special Assistantship for Antarctica in the Bureau of International Organization Affairs. Appointed to this position was George H. Owen, who had served as an alternate United States representative to the Treaty Conference.³⁷ This marked the first time in United States history that the Department of State had assigned the responsibility for Antarctic affairs as other than a temporary or a collateral duty.

The State Department also established an interagency 'Antarctic Coordinating Group' to accord other interested government agencies a voice in matters pertaining to the Antarctic. The Group was composed of representatives of the Departments of State, Defense, Commerce, and the Interior and commenced weekly, informal meetings under the chairmanship of Special Assistant Owen on March 3, 1961.³⁸

³⁶Statement of the President Upon Signing Orders Abolishing the Operations Coordinating Board, February 19, 1961, in Public Papers of the Presidents of the United States: John F. Kennedy 1961 (Washington: United States Government Printing Office, 1962), p. 104.

³⁷House Territorial and Insular Affairs Subcommittee, Hearings on Antarctica Legislation--1961, p. 38.

³⁸Head, Office of Antarctic Programs, National Science Foundation to Dr. J. L. Taylor, Consultant on Territorial Affairs, House Interior and Insular Affairs Committee, September 14, 1961, and September 25, 1961, in Ibid., pp. 51-52.

Certain members of the House of Representatives remained concerned, however, with the need for more formal arrangements for the coordination of United States activities in the Antarctic and were also becoming fearful that the interests of the United States were not being adequately considered under the Antarctic Treaty. In hopes of correcting these alleged deficiencies, Representative Zablocki re-introduced his Richard E. Byrd Antarctic Commission Bill in the Eighty-seventh Congress.

Hearings on the Zablocki Bill were again held by the Subcommittee on Territorial and Insular Affairs on August 24 and 25, 1961. Included in these hearings were three other bills, all identical to that of Representative Zablocki, which had been introduced respectively by Representatives Wayne N. Aspinall of Colorado, the chairman of the Interior and Insular Affairs Committee, John P. Saylor of Pennsylvania, the ranking minority member of the committee, and Leo. W. O'Brien of New York, the chairman of the subcommittee.³⁹

Chairman Aspinall recognized the existence of a jurisdictional question within Congress over matters pertaining to the Antarctic and, as the House Committee on Interstate and Foreign Commerce had done in its report on the IGY in

³⁹House Territorial and Insular Affairs Subcommittee, Hearings on Antarctica Legislation--1961, p. 1.

1958, presented a statement in justification of the interest taken by his committee. He maintained that the Interior and Insular Affairs Committee possessed "some jurisdiction" over Antarctic matters not only because the United States exercised jurisdiction over Antarctic installations but also because the American public was generally interested in such matters.⁴⁰

Testimony both in favor of and in opposition to the proposed legislation was more specific and more heated than it had been in the hearings of the year before. The position of the executive departments and independent agencies had remained that present arrangements for the coordination of Antarctic programs were operating in a satisfactory manner and that an Antarctic commission was therefore unnecessary.⁴¹ Even if such a commission were established, it was stated before the Subcommittee, interdepartmental coordina-

⁴⁰House Territorial and Insular Affairs Subcommittee, Hearings on Antarctica Legislation--1961, p. 1.

⁴¹Assistant Secretary of the Interior to Chairman, House Interior and Insular Affairs Committee, August 23, 1961, in *Ibid.*, p. 5; Assistant Secretary of State to Chairman, House Interior and Insular Affairs Committee, August 17, 1961, in *Ibid.*, pp. 5-6; Acting Secretary of Commerce to Chairman, House Interior and Insular Affairs Committee, August 23, 1961, in *Ibid.*, pp. 6-7; General Counsel, Department of Defense, to Chairman, House Interior and Insular Affairs Committee, August 10, 1961, in *Ibid.*, pp. 7-8; and Director, National Science Foundation, to Chairman, House Interior and Insular Affairs Committee, August 23, 1961, in *Ibid.*, pp. 9-10.

tion would still be required. Specifically, the State Department spokesman, Special Assistant for Antarctica Owen, maintained that any activities involving relations with other nations would have to remain under the guidance of the State Department.⁴² Rear Admiral Tyree expressed the similar belief held by the Navy with regard to its role in logistic support.⁴³

The executive departments also agreed that the primary American activity in the Antarctic for the foreseeable future would be the collection of scientific data and that the coordination of specific Antarctic programs should therefore continue to be effected by the National Science Foundation. Regarding these scientific activities, Dr. Albert P. Crary, the Chief Scientist for Antarctic Research Programs of the Foundation, stated, "I have seen no lack of coordination nor have I heard the scientists express any lack of coordination."⁴⁴ Dr. Crary also expressed the Foundation's belief that the creation of new administrative arrangements could be detrimental to the present successful effort.⁴⁵

⁴²House Territorial and Insular Affairs Subcommittee, Hearings on Antarctica Legislation--1961, p. 28.

⁴³Ibid., p. 61.

⁴⁴Ibid., p. 22.

⁴⁵Ibid., p. 22.

The executive departments and independent agencies were specifically opposed to the centralization of Antarctic data as envisaged by the proposed commission. They believed that in most cases data from the Antarctic was meaningless unless combined with information obtained in other areas and that to replace the 'clearinghouse' function exercised by the National Science Foundation with a central repository would therefore result in duplication of effort. The Department of Commerce, in particular, maintained that its Weather Bureau should retain the responsibility for all meteorological data, as should its Coast and Geodetic Survey with regard to data relating to tides, seismology, and geomagnetism.⁴⁶

Testifying in favor of his bill, Representative Saylor criticized the haphazard manner in which he believed Antarctic operations were being coordinated. He maintained, in addition, that the United States should anticipate developments in the Antarctic that might cause a shift in emphasis from scientific goals to those connected with political, economic, or defense interests by creating an agency which could plan for all eventualities. He accused the opponents of the Antarctic Commission of "empire build-

⁴⁶Acting Secretary of Commerce to Chairman, House Interior and Insular Affairs Committee, August 23, 1961, in House Territorial and Insular Affairs Subcommittee, Hearings on Antarctica Legislation--1961, p. 7.

ing" within their agencies,⁴⁷ and this accusation was supported by Committee Chairman Aspinall.⁴⁸

Representative Saylor and other proponents of the Antarctic Commission indicated a lack of knowledge regarding the current governmental organization for Antarctic activities and seemed to be under the impression that the National Science Foundation was the coordinating agency for the entirety of United States Antarctic programs rather than for only those relating to science. Representative Zablocki went one step further and stated that no agency had been authorized or directed to coordinate the American effort in the Antarctic.⁴⁹ In fact, however, the responsibility for such overall coordination had been specifically assigned to the Department of State following the abolishment of the Operations Coordinating Board. Whether this responsibility should have been so assigned or was being exercised effectively is another question entirely.

It also appeared that dissatisfaction with the emphasis on science in the Antarctic Treaty was an important motive behind the proposed legislation. Certain congressmen not only maintained that the United States should

⁴⁷House Territorial and Insular Affairs Subcommittee, Hearings on Antarctica Legislation--1961, p. 11.

⁴⁸Ibid., p. 11.

⁴⁹Ibid., pp. 12, 44, 47.

anticipate a shift to other than scientific goals in the Antarctic but seemed to believe that an Antarctic commission could somehow promote that shift. Representative Zablocki stated that it was precisely this concern over the Treaty which had led him to introduce his bill in the first place.⁵⁰ Representative Saylor characterized the Treaty as a "sacrifice on the altar of State Department expediency" and expressed the doubt that supporters of the Treaty could be considered "red-blooded Americans."⁵¹ More specifically, Representative Saylor stated to Mr. Owen:

What you have done as a result of that treaty, you have taken this country, your country and mine, the country that has done more exploring, spent more money, and done more work in finding out what is down there than all the rest of the world put together--you have handcuffed the Defense Department so they cannot use it for any defense experiments whatsoever.⁵²

In fact, the only "defense experiments" prohibited under the Treaty were those related to weaponry. In addition, the failure of the Treaty to concern itself with economic development did not mean that the United States was

⁵⁰House Territorial and Insular Affairs Subcommittee, Hearings on Antarctica Legislation--1961, p. 11.

⁵¹ibid., pp. 42-43.

⁵²ibid., p. 42.

refraining from activities in that regard. Norton Pomeranz, the Assistant for International Activities of the Interior Department's Technical Review Staff, informed the subcommittee that the Interior Department's Bureau of Mines and Geological Survey were preparing to conduct scientific studies in the Antarctic with a view toward the future economic development of the region.⁵³

As had occurred in 1960, the Antarctic Commission bills were never voted out of committee. Identical bills were again introduced in 1963 by Representative Zablocki, Saylor, and Craig Hosmer of California and in 1965 by the same three congressmen and also by Representative Rogers C. B. Morton of Maryland. These bills received no formal hearings but were the subject of testimony in hearings on the Navy's Operations Deep Freeze on various dates in 1964 and 1965.⁵⁴ The objections of the executive departments and the National Science Foundation have remained unchanged up to the present time (1969), and no further proposals

⁵³House Territorial and Insular Affairs Subcommittee, Hearings on Antarctica Legislation--1961, pp. 44-45.

⁵⁴U. S., Congress, House of Representatives, Committee on Interior and Insular Affairs, Subcommittee on Territorial and Insular Affairs, Hearings on Deep Freeze 1965 Operations, 89th Cong., 1st sess., April 12-13, May 6-7, and June 15, 1965, Serial No. 6 (Washington: United States Government Printing Office, 1965); and House Territorial and Insular Affairs Subcommittee, Hearings on Deep Freeze 1963-64 Operations.

for the establishment of an Antarctic commission have received official consideration.

Regardless of the advantages or disadvantages of an Antarctic commission, which will be discussed in the concluding chapter, the congressional criticism of the nature of the coordination being effected by the State Department was not unwarranted. Prior to 1961, the Operations Coordinating Board had promulgated annual statements of Antarctic policy and broad guidelines for Antarctic operations. This practice had not been followed by the State Department, and the coordination of specific programs had accordingly been made more difficult.⁵⁵ This lack of direction could not be alleviated by the State Department's interagency committee, which involved informal meetings among relatively low-level personnel.

The need for improvements in the coordination of Antarctic programs and, undoubtedly, the desire to avoid further criticism from Congress led to discussions in October, 1964, among the Assistant Secretary of State for International Organization Affairs, Harlan Cleveland, the Assistant Secretary of Defense for International Security Affairs, John T. McNaughton, and Director Leland J. Haworth

⁵⁵House Territorial and Insular Affairs Subcommittee, Hearings on Deep Freeze 1963-64 Operations, p. 39.

of the National Science Foundation. After consulting with the Departments of Commerce and the Interior, the three officials decided to form an 'Antarctic Policy Group,' consisting of themselves, to provide a level of overall policy guidance higher than that currently being afforded. The Group would have a permanent nature, and the State Department member would act as its chairman.⁵⁶ On April 10, 1965, their decision was approved by President Johnson, who charged the Group with guiding United States Antarctic policy and assisting in the development of United States Antarctic programs.⁵⁷

The Antarctic Policy Group was assigned specific responsibilities similar to those held by the Operations Coordinating Board four years earlier. These included:

(1) formulating United States Antarctic policies, (2) establishing guidelines for Antarctic activities, and (3) reviewing and approving plans for specific United States programs. The interagency committee established in 1961 re-

⁵⁶Opening Statement by the Honorable Harlan Cleveland, Assistant Secretary of State for International Organization Affairs, before the House Subcommittee on Territorial and Insular Affairs, April 12, 1965, mimeo., Edward Ginn Library, Fletcher School of Law and Diplomacy, p. 11.

⁵⁷Statement by the President in Response to a Progress Report by the Antarctic Policy Group, May 1, 1965, in Public Papers of the Presidents of the United States: Lyndon B. Johnson 1965 (2 vols., Washington: United States Government Printing Office, 1966), Vol. 1, p. 469.

mained in existence to afford a forum for the discussion of policy at a lower level.⁵⁸ The State Department abolished the Special Assistantship for Antarctica, however, and the responsibility for Antarctic matters again became a collateral duty within the Bureau of International Organization Affairs.

To facilitate the new arrangements, the Defense Department abolished the position of Officer-in-Charge, United States Antarctic Programs on April 22, 1965. Duties of this office relating to the coordination of Antarctic activities between the Defense Department and other agencies were transferred to a newly-created Special Assistantship for Antarctic Matters in the Office of the Assistant Secretary of Defense for International Security Affairs.⁵⁹

No further changes have been made in the arrangements within the United States Government for Antarctic activities. With the exception of the above changes occasioned by the abolishment of the Operations Coordinating Board and the later creation of the Antarctic Policy Group, the Budget Bureau Circular of 1960 remains at present (1969) the organizational directive for the formulation and coordination of United States Antarctic policies and programs.

⁵⁸Statement of Assistant Secretary of State for International Organization Affairs, April 12, 1965, mimeo., pp. 11-12.

⁵⁹Dater, "Organizational Developments," p. 31.

The United States is conducting field operations in the Antarctic in 1969 in accordance with the second five-year plan of the National Science Foundation. Submitted in 1964 and reissued in an updated version in 1966, it defines as a principal objective the exploration of the 40 percent of the Antarctic Continent that remains relatively unknown. The plan also calls for a major effort on the Palmer Peninsula, which is particularly important to the sciences of geology and biology as both an extension of the Andes Mountains and the region of Antarctica most prolific in plant and animal life. During this five-year period, the research to be conducted in Antarctica involves eight major scientific disciplines: biology, cartography, geology, glaciology, earth geophysics, which includes seismology and studies of gravity and magnetism, meteorology, oceanography, and upper atmosphere physics.⁶⁰

To facilitate the scientific effort on the Palmer Peninsula, Palmer Station was constructed on Anvers Island during the 1964-1965 season. A sixth permanent United States Antarctic Station, Plateau, was constructed during the Antarctic summer of 1965-1966 on the polar plateau, some 600

⁶⁰U. S., National Science Foundation, Proposed Antarctic Science Program, 1964-69, in House Interior and Insular Affairs Subcommittee, Hearings on Deep Freeze 1963-64 Operations, pp. 63-87.

miles beyond the Pole from McMurdo Sound.⁶¹

Of great significance to the scale of scientific activity that can be conducted in the Antarctic has been the revolution in Antarctic air transport effected by the United States Navy and Air Force. In the past, a researcher was forced to arrive in Antarctica in the austral summer, spend the winter at a station, and then commence his studies the following spring. His period of effective work was further limited by the time involved in surface travel to the specific region in which he wished to conduct his research. Scientists thus had to spend over a year away from their home institutions in order to carry out a few weeks of research. Now a researcher can be flown directly to and from the Antarctic area of interest in one season.⁶²

The number of researchers involved in Antarctic programs under the auspices of the National Science Foundation has increased from 109 in 1960-1961 to 220 in 1967-1968. Of the latter total, 61 percent were affiliated with universities, 13 percent represented private research institutions, and 21 percent were engaged in projects on behalf of government agencies, which included the Departments of

⁶¹Senate Public Works Committee, Report on United States Operations in Antarctica, p. 8.

⁶²Dater, "Organizational Developments," p. 29.

Commerce, the Interior, the Army, and the Air Force, and the National Aeronautics and Space Administration. The remaining five percent was composed of eleven administrators representing either the National Science Foundation or the National Academy of Sciences. Not included in these totals are the various scientific projects conducted by the Navy in conjunction with its Operations Deep Freeze.⁶³

Expenditures for United States Antarctic programs have increased correspondingly during the seven-year period. In fiscal year 1961, the National Science Foundation awarded grants for Antarctic research totaling \$5,460,820, a sum which exceeded by over \$400,000 the amount awarded for such research during the entire IGY. In the same fiscal year, the Navy's direct expenditures for Antarctic logistic support totaled \$16,265,000--an increase of approximately 50 percent over the average cost of the Operations Deep Freeze related to IGY programs. In fiscal year 1962, the budget of the Naval Support Force, Antarctica, was cut to \$11,184,000. With the completion of the major part of the post-IGY reconstruction, however, this level of support allowed the National Science Foundation to increase its grants for Antarctic research to a total of

⁶³"USARP [United States Antarctic Research Program] Field Personnel, Summer 1967-1968," Antarctic Journal of the United States, Vol. 3 (July-August, 1968), pp. 135-137.

\$7,187,722.⁶⁴

On June 14, 1962, Rear Admiral Tyree, the commander of the Naval Support Force, Antarctica, submitted a budget estimate for fiscal year 1964 calling for expenditures of \$85.9 million, to include a new icebreaker and several aircraft. The Chief of Naval Operations approved for planning purposes a budget of \$38 million and informed Admiral Tyree that the aircraft and icebreaker would be obtained through other programs. In later budget reviews, this sum became reduced to \$25.8 million. On December 17, 1962, the Chief of Naval Operations promulgated the final decision of the Secretary of Defense to establish a limit of \$20 million to the expenditures of Deep Freeze 64. The House Subcommittee on Department of Defense Expenditures subsequently recommended a further reduction of \$.5 million in the Deep Freeze budget, and Admiral Tyree's final budget estimate for fiscal year 1964 was \$19.5 million.⁶⁵

This limit to the budget of the Naval Support Force has remained in existence up to the present (1969). It has proved subject to some adjustment, however, and expen-

⁶⁴For the record of expenditures in connection with United States Antarctic programs, see U. S., National Science Foundation, Annual Report (Washington: United States Government Printing Office) for the fiscal year in question.

⁶⁵U. S., Navy, Commander, United States Naval Support Force, Antarctica, Report of Operation Deep Freeze 64 (Washington; 1964), Library of the U. S. Naval Support Force, Antarctica, Washington, D. C., p. 77.

ditures for some fiscal years have approached \$20 million.⁶⁶ Inasmuch as the amount of scientific research that can be conducted in the Antarctic depends roughly on the level of logistic support afforded by the Navy, expenditures by the National Science Foundation for Antarctic programs have remained stable at approximately \$8 million per year since 1964. Both the Foundation and the Navy appear satisfied with the current level of Antarctic research activities, and neither is calling for any significant increase in expenditures.⁶⁷

The failure of the congressmen noted earlier to achieve radical change in either the organizational arrangements for Antarctic operations or the nature of current Antarctic policy can be attributed to the degree of success enjoyed by those arrangements and that policy during the years since the signing of the Antarctic Treaty. Little real disagreement existed among the majority of the members of the executive and legislative branches of the United States Government with the following sentiments, expressed by the Assistant Secretary of State for International Organization Affairs, Harlan Cleveland, in 1965:

⁶⁶Dater, "Organizational Developments," p. 31.

⁶⁷Senate Public Works Committee, Report on United States Operations in Antarctica, p. 12.

The Antarctic Program is working smoothly and efficiently. The relations among the agencies involved are good; the lines of responsibility are clear; the leadership of both the support force and the scientific program is in excellent hands. Internationally, the Program works with very little national rivalry; politics is at a remarkable minimum.

When Congress finds a Government activity that works as well as the Antarctic Program does, it is cause not for reorganizing but for rejoicing.⁶⁸

An important factor in these successes has been the ability of the parties to the Antarctic Treaty to reach further agreement at meetings of consultation during the 1960's. It had been stipulated in the Treaty that the first such meeting would be convened in Canberra within two months after the Treaty had entered into force.⁶⁹ In the meantime, however, 37 interim consultative meetings were held in Washington among representatives of the signatories. At these meetings, specific procedures were developed to assist the fulfillment of the terms of the Treaty regarding scientific cooperation in general and the exchange of data in particular.⁷⁰ All the recommendations adopted by both the interim and the formal consultative

⁶⁸Statement of Assistant Secretary of State for International Organization Affairs, April 12, 1965, minco., p. 12.

⁶⁹U. S., Department of State, "The Antarctic Treaty," United States Treaties and Other International Agreements (Washington: United States Government Printing Office, 1961), Vol. 12, pt. 1, p. 798.

⁷⁰Department of State, United States Policy, p. 11.

meetings have received the subsequent approval of the Contracting Powers and have entered into force among them in accordance with Article 9 of the Treaty.

The delegates to the interim meeting of July 19, 1960, recommended to their respective governments that the Special Committee on Antarctic Research, which had been formed by the International Council of Scientific Unions in 1957, be encouraged to continue to act as the international advisory and coordinating body for Antarctic research programs.⁷¹ This enabled the meetings of consultation under the Antarctic Treaty to concern themselves primarily with political and administrative matters. To reflect its permanence, SCAR subsequently changed its name from Special to Scientific Committee on Antarctic Research and extended its area of concern to include other than the geophysical sciences.⁷² As a member of the ICSU, the National Academy of Sciences represents the United States at the annual meetings of SCAR and informs the National Science Foundation of any SCAR recommendations pertinent to United States Antarctic programs.⁷³ Like the resolutions of its predecessor,

⁷¹Department of State, United States Policy, p. 11.

⁷²John Hanessian, Jr., International Scientific Cooperation in the Antarctic (New York: American Universities Field Staff, 1962), pp. 8-9.

⁷³House Territorial and Insular Affairs Subcommittee, Hearings on Deep Freeze 1963-64 Operations, p. 97.

the Comité Spécial de l'Année Géophysique Internationale, recommendations made by SCAR to the participating nations have no force other than as expressions of the wishes of private scientific bodies unless the governments concerned decide to put those recommendations into practice.

The First Antarctic Treaty Consultative Meeting was held in Canberra in July, 1961. The delegates agreed upon 16 recommendations, the majority of which were designed to amplify the terms of the Treaty itself. For example, where Article 5 of the Treaty had simply stated that each Party should inform the others of all its expeditions, stations, and military personnel and equipment in Antarctica, Recommendation 6 of the First Consultative Meeting proposed that such information be exchanged before November 30 each year and include such items as: (1) names, types, numbers, descriptions, and armaments of ships, aircraft and other vehicles introduced, (2) itineraries to be followed by expeditions to, from, and within Antarctica, (3) names and ranks of military officers and professional affiliations of scientific personnel, (4) content of scientific programs, and (5) principle scientific equipment to

be used.⁷⁴

Other recommendations pertained to the exchange of scientific personnel, the use of the World Data Centers, cooperation with international organizations interested in Antarctic research, the exchange of data on logistic problems, the protection of objects of historic interest, and the exchange of "information on the application of nuclear equipment and techniques in the Treaty area."⁷⁵

Two of the recommendations, however, represented a movement toward agreement in entirely new areas--those of postal services and conservation. The provision of postal services in Antarctica had caused disputes on several occasions in the past, due to its relationship to the effective administration deemed necessary to a successful territorial claim. It was recommended at Canberra, however, that the respective governments:

⁷⁴Recommendations of the First Antarctic Treaty Consultative Meeting, July 10-24, 1961, in Department of State, United States Policy, p. 33.

NOTE--The recommendations of the First Antarctic Treaty Consultative Meeting entered into force on April 30, 1962. U. S., Department of State, "Antarctica: Measures in Furtherance of Principles and Objectives in the Antarctic Treaty," United States Treaties and Other International Agreements (Washington: United States Government Printing Office, 1963), Vol. 13, pt. 2, pp. 1349-1357.

⁷⁵Recommendations of the First Antarctic Treaty Consultative Meeting, July 10-24, 1961, in Department of State, United States Policy, pp. 32-36.

1. promote cooperation among expeditions in the Treaty area in the collection and distribution of mail for expedition members;

2. advise each other of opportunities for forwarding mail to and from stations in the Treaty area;

3. consult together with a view to reaching agreement on further practical measures for improving postal communications in the Treaty area.⁷⁶

The conservation of Antarctic resources has an obvious relationship to the future economic exploitation of the region, regarding which no agreement whatsoever was thought possible at the Antarctic Treaty Conference. At the First Consultative Meeting, however, the delegates recommended that their governments "recognize the urgent need for measures to conserve the living resources of the Treaty area"⁷⁷ and consult on the establishment of specific measures of conservation. The delegates further recommended that in the interim the nations issue general rules of conduct on the lines recommended by SCAR at its meeting in Cambridge, England, in August, 1960.

SCAR had recommended to the participating nations that the indigenous plant and animal life of the Antarctic should not be disturbed, destroyed, or injured except for four specific purposes: (1) to conduct scientific studies,

⁷⁶Recommendations of the First Antarctic Treaty Consultative Meeting, July 10-24, 1961, in Department of State, United States Policy, p. 36.

⁷⁷Ibid., p. 34.

(2) to obtain food for man and dogs, (3) to obtain specimens for zoological gardens, and (4) to obtain "a strictly limited number of specimens" for private purposes.⁷⁸ SCAR maintained that even the above exceptions should be permitted only under strict controls and if there were no danger of depleting local stocks and that in no case should exceptions (3) and (4) apply to fur seals. SCAR had also recommended that the introduction of alien species should be prohibited "except when rigidly controlled having regard to their chances of survival, capacity of reproduction and utilization by man."⁷⁹ Finally, SCAR had recommended that various activities potentially detrimental to wildlife be regulated. These included the operation of aircraft and other vehicles in close proximity to colonies of birds or seals, the discharge of oil by ships, and allowing dogs to run free.

Along with the other recommendations of the First Antarctic Treaty Consultative Meeting, the interim measures of conservation entered into force on April 30, 1962. No final agreement on measures of conservation had been reached among the Parties by the time of the Second Meet-

⁷⁸Recommendations of the First Antarctic Treaty Consultative Meeting, July 10-24, 1961, in Department of State, United States Policy, p. 35.

⁷⁹Ibid., pp. 34-35.

ing, held in Buenos Aires in July, 1962; and the delegates to that meeting recommended that their governments continue to consult on the matter.⁸⁰

The Third and Fourth Consultative Meetings were held in 1964 and 1966 in Brussels and Santiago respectively. At the Brussels Meeting, the delegates signed the Agreed Measures for the Conservation of Antarctic Flora and Fauna, which contained virtually the same rules as the interim measures based on the recommendations of SCAR and made any exception to them subject to prior issuance of a permit by a participating nation. The Agreed Measures contain no general restrictions regarding plant life but prohibit within the Treaty area "the killing, wounding, capturing, or molesting of any native animal or native bird."⁸¹ Permits allowing exceptions to this rule were to be issued only to provide necessary food for men and dogs, for study,

⁸⁰Recommendations of the Second Antarctic Treaty Consultative Meeting, July 18-28, 1962, in Department of State, United States Policy, p. 39.

NOTE--The recommendations of the Second Antarctic Consultative Meeting entered into force on January 11, 1963. U. S., Department of State, "Antarctica: Measures in Furtherance of Principles and Objectives of the Antarctic Treaty," United States Treaties and Other International Agreements (Washington: United States Government Printing Office, 1964), Vol. 14, pt. 1, pp. 99-103.

⁸¹Agreed Measures for the Conservation of Antarctic Flora and Fauna in "Report of the Third Antarctic Treaty Consultative Meeting, Brussels, 1964," The Polar Record, Vol. 12 (January, 1965), p. 458.

and for the collecting of specimens. Permits would also be required for the importation of any non-indigenous plant or animal life and were to be granted only for sledge dogs, other domestic animals, domestic plants, and laboratory specimens. In no case was a permit to be granted for the importation of poultry. The Agreed Measures also accorded special status to regions of particular biological importance. Within such 'Specially Protected Areas,' permits would be necessary for the additional activities of collecting plants and operating vehicles.⁸²

The Agreed Measures for the Conservation of Antarctic Flora and Fauna represented a definite concession by the claimant nations. Not only were certain areas of their claims placed in a special international status but also the right to permit activities prohibited by the Agreed Measures, both in these areas and throughout Antarctica generally, had been granted to all participants. The sovereign right to engage in such licensing activities had been jealously guarded by the claimants in the past and, like the provision of postal services, had caused disputes on more than one occasion. In the United States, permits to engage in activities prohibited by the Agreed Measures are

⁸²Agreed Measures in "Report of the Third Antarctic Treaty Consultative Meeting," pp. 459-460.

issued to researchers by the National Science Foundation in accordance with general guidelines established by the Antarctic Policy Group.⁸³

The Antarctic Treaty has also fulfilled its purpose of maintaining a climate conducive to international cooperation in the field. During the period since 1960, the United States has been involved at one time or another in programs of personnel exchange with each of the eleven other Contracting Parties. In addition, participants in United States Antarctic activities have included scientists from such non-signatory nations as Austria, Brazil, Canada, Denmark, the German Federal Republic, Italy, Lebanon, and Switzerland. During the 1967-1968 season, for example, American scientists served either with the expeditions or at the Antarctic stations of Japan, Australia, Argentina, the Soviet Union, and the United Kingdom. At the same time, scientists from Belgium, Chile, Norway, South Africa, the Soviet Union, and the German Federal Republic were participating in Antarctic programs under the auspices of the United States.⁸⁴

The participating nations have also engaged in various

⁸³T. O. Jones, "A Review of the 1967-1968 Summer Season," *Antarctic Journal of the United States*, Vol. 3 (July-August, 1968), pp. 79-80.

⁸⁴"International Exchanges, 1967-1968," *Antarctic Journal of the United States*, Vol. 3, (May-June, 1968). pp. 63-64.

joint research programs. In progress at the present time is one of the most significant of these, the International Weddell Sea Oceanographic Expedition (IWSOE). Inaugurated in 1967 and scheduled for completion in 1969, the IWSOE involves the United States icebreaker Glacier and the Argentine icebreaker San Martin in studies of the physical and biological characteristics of the icebound central and western reaches of the Weddell Sea. Except for a small amount of data obtained by pre-World War I German and British expeditions, the region has remained unknown up to this time.⁸⁵

Official United States Observers have conducted two tours of inspection in the Antarctic since the entry of the Treaty into force. The first, during the 1963-1964 Antarctic summer, involved a total of 10 Antarctic stations belonging to Argentina, Chile, France, New Zealand, the Soviet Union, and the United Kingdom. With regard to the scope of the inspection, the observers reported:

All buildings and facilities with a few minor exceptions were inspected at each station visited. Equipment and scientific instruments were examined in sufficient detail to ascertain their use and intended purpose. Conversations were held with sta-

⁸⁵Robert L. Dale, "International Weddell Sea Oceanographic Expedition - 1968," Antarctic Journal of the United States, Vol. 3 (July-August, 1968), p. 80.

tion leaders and key personnel to ascertain the nature of work programs and activities in order to verify that each Antarctic station was being used for peaceful purposes.⁸⁶

The United States inspection team found no evidence that Antarctica was being utilized for other than peaceful purposes and concluded that "the activities of the stations visited were being conducted in consonance with the Antarctic Treaty."⁸⁷

During the 1966-1967 season, United States observers conducted a second round of inspections, involving Antarctic stations of Argentina, Australia, France, Japan, South Africa, the Soviet Union, and the United Kingdom. Also inspected at this time was the Danish ship *Thala Dan* in the process of unloading supplies and equipment at Australia's Wilkes Station while under charter to French and Australian expeditions. Again the observers reported:

There was no evidence to indicate any violation of either the provisions or the spirit of the Antarctic Treaty. All the information obtained at these stations indicates Antarctica is being used solely for peaceful purposes.⁸⁸

⁸⁶Report of United States Observers on Inspection of Antarctic Stations, 1963-64 Austral Summer Season, in Department of State, United States Policy, p. 49.

⁸⁷*Ibid.*, p. 49.

⁸⁸U. S., Department of State, Report of United States Observers on Inspection of Antarctic Stations--1966-67 Austral Summer Season (Washington: 1967), p. 2.

The United States appears to have been successful in achieving the goals that it had sought through the Antarctic Conference of 1959. Antarctica remains demilitarized, and scientific research is being conducted without hindrance throughout the region. In 1969, political tensions over Antarctic claims are at their lowest level since the original British Letters Patent of 1908, and the claimants themselves appear to have softened their positions in the face of the great successes of the Treaty and its programs of multinational research and scientific data exchange. As a result, the nations involved in the Meetings of Consultation are finding themselves able to reach agreement on an ever increasing number of cooperative measures.

The United States remains committed to the policies which resulted in the Antarctic Treaty and the state of affairs that currently exists in Antarctica, and this commitment was re-affirmed on May 30, 1965, by President Lyndon B. Johnson:

Our objective in Antarctica can be summarized in four very simple statements. We stand behind the Antarctic Treaty and will do everything in our power to ensure that the Antarctic region will be a place of peace rather than a place of hostile international rivalries; we strongly favor international cooperation among the nations which are active in Antarctica; we support, with all our resources, scientific research in Antarctica, further exploration and charting of Antarctica, the development of new methods of transport and logistics in that vast region, and the preservation of unique

plant and animal life there. Finally, we earnestly hope that these great projects of peaceful cooperation in Antarctica will yield resources which every nation needs and every nation can use.⁸⁹

⁸⁹Remarks Following a Meeting with Members of the Antarctic Policy Group, May 20, 1965, in Public Papers: Lyndon B. Johnson 1965, Vol. 1, p. 564.

CONCLUSIONS

Agencies of the United States Government have now been engaged in uninterrupted operations on the Antarctic Continent for a period of 15 years. Prior to the cruise of the icebreaker Atka in 1954, however, such involvement had been limited to three separate periods, each of only two years duration. Even if the activities of private United States Antarctic expeditions are included, the present period of continuous operations has already surpassed in length the total duration of all such operations on the part of the United States in the past.

The sporadic nature of United States involvement in the Antarctic prior to the International Geophysical Year can be traced to a lack of direct and immediate interests in the region. Unlike the nations more actively involved during the first half of the twentieth century, the United States was neither geographically near to Antarctica nor significantly engaged in Antarctic fishing or whaling. The United States was concerned with protecting the rights it possessed in Antarctica primarily in order to be in a position to share in any future discoveries of value, and this concern, in itself, failed to provide sufficient incentive for the expenditures necessary to the continued maintenance of a United States presence.

A more immediate interest appeared as a result of the technological advancements of the late 1920's and early

1930's, and the application of these advances to Antarctica by men such as Admiral Byrd. The demonstrated feasibility of sustained operations in the Antarctic caused military strategists to begin to consider the possible role of the region in future armed conflicts. Antarctica was, and remains, of minimal strategic importance, however, due both to its geographic location and to the immense costs that would be involved in the establishment of military bases on the continent. Defense ministries of all nations have consistently preferred to allocate their funds to less costly projects in regions of greater interest. Conversely, if any nation had been willing to undertake the militarization of the Antarctic, the sheer expanse of the region coupled with the lack of suitable landing beaches would have made its forces extremely difficult to dislodge. Moreover, the existence of hostile aircraft or missile bases in the Antarctic could have posed a significant threat to allies of the United States in the Southern Hemisphere.¹ The United States Government therefore felt constrained to respond to demonstrations of interest in Antarctica by potentially hostile powers, such as Japan and Germany in the late 1930's and the Soviet Union in 1950. None of these

¹Walter G. Sullivan, "Antarctica in a Two-Power World," *Foreign Affairs*, Vol. 36 (October, 1957), p. 163.

threats materialized, however; the Japanese and Soviets both refrained from any activity on the continent until the IGY, and Nazi Germany failed to follow up its one expedition. As a consequence, the United States was not presented with incentives for permanent Antarctic operations.

An interest in Antarctic research began to develop among American scientists, however, as a result of the work of the Byrd Expeditions of 1928 and 1933; but until the IGY had dramatically demonstrated the value of that research, the United States Government was not inclined to grant it permanent support. In any event, all formal claims to sovereignty over Antarctic territory had been asserted by nations 'friendly' to the United States, and none of these nations ever offered a significant threat to the activities of American scientists. The presence of United States expeditions in regions claimed by these nations was often the cause of diplomatic protests, but none of the claimants was disposed to use harsher measures.

The non-existence of direct incentives for permanent United States involvement in the Antarctic was especially apparent during the period from 1939 to 1941. According to the report submitted by the State Department in January, 1939, official action toward protecting American interests in Antarctica was justified by four factors: (1) the feasibility of polar aviation, (2) American interests in the strategic and economic implications of Antarctica, (3) the

measures being taken by several nations toward cementing their polar claims, and (4) recent indications of interest in the Antarctic on the part of Japan and Germany.²

It is doubtful that the existence of the above factors alone would have led the executive branch to promote an official expedition to the Antarctic or Congress to appropriate the necessary funds. These same factors were present on many occasions both before and after 1939, and the United States never responded to them with an official Antarctic expedition. It would therefore appear that the real factors behind the 1939 expedition were the interest of President Roosevelt in the Antarctic and the action taken by Germany beyond its simple manifestation of interest. Indeed, once the direct German threat had receded, the continued existence of the factors mentioned by the State Department were not seen by Congress to justify the permanence of the United States Antarctic Service, particularly during a time of rapidly increasing governmental expenditures for other purposes.

The next period of official United States operations in the Antarctic consisted of the two expeditions which were planned and conducted by the Navy in 1946 and 1947 and fi-

²Acting Secretary of State Sumner Welles to President Franklin D. Roosevelt, File No. 800.014 Antarctic/129A, January 6, 1939, U. S. National Archives, Dept. of State.

nanced from the Navy's normal operating funds. This involvement had not been precipitated by Antarctic interests per se but rather by the desire to test military equipment in a polar region where activities would be less likely to cause an increase of tensions with the Soviet Union. As had occurred earlier in the decade, Antarctic operations were again terminated for reasons of economy and internal politics despite the belief held by Admiral Byrd and others that the mapping operations envisaged for Operation High-jump II could have established predominant American rights over virtually the entire continent.

The lack of direct, permanent incentives affected not only the operational involvement of the United States in Antarctica prior to the International Geophysical Year, but the political and diplomatic involvement as well. State Department concern with Antarctic affairs existed on temporary bases only, precipitated in each case by the occurrence of events externally to its own policy-making machinery. Such events included: (1) acts by claimant nations which appeared to threaten United States rights or access to Antarctica, (2) manifestations of interest in the Antarctic by nations potentially hostile to the United States, (3) needs for diplomatic arrangements relating to the conduct of private American expeditions, (4) congressional pressures for action in defense of American rights in the Antarctic, and (5) conflicts among other nations over

Antarctic questions, which threatened harmful repercussions to other interests of the United States.

State Department officials were assigned the responsibility for dealing with the matter at hand on an ad hoc basis and were invariably forced to delay any action until a study could be completed on the nature of the interests, if any, possessed by the United States in the matter. With the nonexistence of any permanent organ within the State Department or elsewhere in the government to maintain a continuing concern with developments in Antarctica and their relation to American interests, each external event resulted in the creation of new ad hoc arrangements and the commissioning of new studies.

All planning for the implementation of these studies was limited to the duration of the specific problem that had generated the interest in the first place. In the early 1940's, for example, the State Department's active concern with the Antarctic terminated once the direct German threat had receded and the Antarctic Service had ceased operations. In 1950, when American interests in the Antarctic again appeared to be threatened by a potentially hostile nation, the Department accordingly found itself unable to take definitive action.

Similarly, the efforts of 1948 toward obtaining a solution to Antarctic political problems, and particularly those problems related to the Anglo-Argentine-Chilean

claims dispute, ceased once the tripartite warship agreement had appeared to promise a lessening of current tensions. That no solution had in fact been obtained was discovered in 1952 and 1953, when force was used in the Antarctic by both the Argentines and the British. This situation could easily have deteriorated into open warfare in succeeding years had it not been for the occurrence of a fortuitious event--the International Geophysical Year, which had not been devised as an instrument of United States policy but had been initiated by private members of the scientific community.

The successes of both the IGY and the Antarctic Treaty have had the effect of obscuring the deficiencies that existed in United States Antarctic policy prior to the late 1950's. Inasmuch as the Treaty, with its provisions for free access and nonmilitarization, provides the best possible arrangement for the Antarctic from the standpoint of United States interests, the nature of all previous United States Antarctic policies and activities seems justified in retrospect. Such would be the case, however, only if these policies and activities had been consciously and consistently designed with such an outcome as the Treaty in mind--which they most definitely were not. Periods in which international arrangements were promoted alternated both with periods of preparation for the assertion of territorial claims and with periods of complete inactivity.

The advantages of an international solution were recognized by the United States Government in 1939 and, indeed, by State Department Geographer Boggs as early as 1930. Related to the lack of immediate, direct interests in the Antarctic, however, was the reluctance of the United States to face possible harmful repercussions to other relations with the claimant nations by applying the pressures necessary to gain their acceptance to a system of international controls. As late as 1957, Secretary of State Dulles' requirement that a solution to Antarctic problems be not such as to jeopardize United States relations in other areas indicated that the United States was no more willing to apply pressure to the claimants than it had been on previous occasions. Fortunately, the same factors that had assured a continued United States interest caused the claimants to become more amenable to international controls.

On the other hand, a possible formal assertion of a United States claim to Antarctic territory never offered either a realistic solution to the problems of the region or the manner in which United States goals could best be achieved. As previously stated, the sector in which the United States possesses the strongest bases for a claim comprises the least accessible and least desirable areas of the continent. To have included claims to regions which had been formerly claimed by other nations would have involved international controversies doubtlessly more serious

than those feared by the United States through an insistence upon internationalization. Without predominant rights over the entire region, the United States would have been forced, in any case, to relinquish its claim to the right of free access to all parts of the Antarctic. All of this would have been distinctly less advantageous to United States interests than an international arrangement guaranteeing both the nonmilitarization of the region and the right of free access for peaceful purposes. Finally, the assertion of a United States territorial claim would have provided no solution to the dispute over the Palmer Peninsula.

If the claimant nations had continued to persist in their adamant opposition to international arrangements, however, the protection of the interests of the United States in future scientific, economic, or strategic developments in the Antarctic would have demanded the assertion of American claims to as much territory as possible. Prior to 1959, therefore, the United States Government should have been more consistently concerned with steps toward strengthening American rights in the Antarctic. Such activity would have been of immense importance in affording legal rights to a greater expanse of more valuable territory if the attainment of international controls had proved impossible in the past or if the present arrangements should disintegrate in the future. Even more importantly, the simple fact of the United States being in a position to

assert an extensive territorial claim in Antarctica would have been extremely valuable as a bargaining point both in earlier attempts at international controls and in any future situations in which the continued existence of such controls might be threatened.

While the Antarctic Treaty remains in force, however, national rights remain frozen at their status in 1959 and the United States continues to possess significant bases for claims only in the least desirable region of the Antarctic Continent. If the economic or strategic value of the Antarctic should become greatly increased in the future and if the international arrangements under the Treaty should then disintegrate, the United States would possess rights to Antarctic territory only on the basis of its activities during the International Geophysical Year, when the other nations interested in the Antarctic were also engaged in extensive Antarctic programs, and its sporadic history of Antarctic operations prior to 1954.

Moreover, the lack of a consistent, comprehensive Antarctic policy, of permanent arrangements for its formulation and conduct, and of continuous activity toward achieving its goals in the Antarctic prior to 1954 could well have resulted in serious damage to United States interests. The key factors in the fortunate avoidance of such a result appear to be the nature of the Anglo-Argentine-Chilean claims dispute, which had neither been resolved nor had

led to serious conflict by the time of the IGY, and the occurrence of the IGY itself.

If the Latin Americans and the British had been able to achieve a peaceful settlement of their dispute, the result would probably have been recognized by the other Antarctic claimants. With the elimination of active claims controversies, the principal impetus behind the United States proposals of 1948 would have been removed along with one of the incentives for a maintenance of an active interest in the region by the United States Government during the late 1940's. If the scientific community had then not developed plans for an IGY, by the time developments in the Antarctic again provided the United States with direct incentives for involvement, the claimants, if not already possessing sufficient bases for their claims, might well have perfected their rights to the point where they could be successfully defended under international law. In such a case, the United States would have been faced with the less than pleasing alternatives of accepting confinement within the unclaimed sector, a region over which it had acquired rights because of its challenge to explorers rather than its value to the nation, becoming involved in continuing controversies with the claimants, or ousting the claimants by force.

Conversely, if tensions over the Palmer Peninsula had not been lessened by the IGY, the use of force in the re-

gion could easily have become increasingly more commonplace, resulting in damage not only to the future prospects for the nonmilitarization of Antarctica but also to important defense alliances of the United States.

It therefore appears that the United States was able to obtain the fulfillment of its goals in the Antarctic in 1959 more through a fortuitous set of events than through deliberate measures of policy. After the feasibility of sustained Antarctic operations had been demonstrated in the 1930's, the United States Government should have acted on a continuing basis with an eye to the future of the Antarctic and the role of the United States in that future rather than having limited its activities to the solution of current problems. The failure to do so is made particularly inexcusable by the fact that the United States Government had demonstrated since 1938 a consistent awareness of the scientific importance of the Antarctic, the probable future economic value of the region, and the threat that hostile military bases in the Antarctic could pose to the nations of the Western Hemisphere.

The continuing concern with the Antarctic that has been demonstrated by the United States Government since 1959 appears to be due to the existence of two factors that had not been present before. The first such factor was the dramatic demonstration by the IGY that Antarctic research offers rewards that are immediately and extremely valuable,

particularly when conducted under cooperative arrangements with other nations. Secondly, the region again became the site of operations by a nation considered potentially hostile to the United States; and as opposed to Germany in 1939, the Soviet Union has shown no intentions of withdrawing. It will be remembered that the House Commerce Committee stated in early 1958 that scientific considerations were adequate in themselves as justification for the continuance of United States operations in the Antarctic but that the Soviet presence made such action imperative.³ Since that time, statements made by various officials of the United States Government have indicated that the importance assigned to each of the two factors varies between individuals and organizations.

The United States Government has never made a formal decision to support a permanent Antarctic effort. In its report on the IGY, the House Commerce Committee recommended only that the United States activities in the Antarctic should "continue for another year."⁴ Since the signing of the Antarctic Treaty, however, the permanence of the

³U. S., Congress, House of Representatives, Committee on Interstate and Foreign Commerce, International Geophysical Year, The Arctic and Antarctica, 85th Cong., 2nd sess., House Rept. No. 1348, Serial No. 12072 (Washington: United States Government Printing Office, 1958), pp. 44-45.

⁴Ibid., p. 45.

United States effort in Antarctica has been presumed by both the legislative and executive branches of the United States Government. The long-range planning conducted by the Navy and the National Science Foundation attests to this presumption as does the lack of congressional objection to the expenditures involved.

With this seemingly permanent, but left-handed, commitment to Antarctic operations, the United States Government was led to create arrangements for the consideration of Antarctic policy on a continuing basis. These arrangements, first the Antarctic Working Group of the Operations Coordinating Board and later the Antarctic Policy Group, have been highly successful in coordinating United States Antarctic activities and promoting the maintenance of a political situation in Antarctica favorable to United States interests.

The centralization of responsibility for all activities relating to the Antarctic in an independent executive commission would serve little useful purpose and would perhaps be detrimental to United States interests. At present, and for the foreseeable future, "it is difficult to conceive of technological activities which uniquely require to be conducted in the Antarctic and could not more easily be undertaken in more accessible and comfortable environ-

ments."⁵ With scientific research remaining the one tangible incentive for Antarctic operations, it is logical that the National Science Foundation should continue to exercise its present level of control. Assigning the responsibility for research solely on the basis of the geographical area in which it is to be conducted would tend to result in duplicated and wasted efforts in addition to diminishing the direct rewards obtainable from that research.

Present United States Antarctic research programs can be divided into two categories: exploratory science and basic science. The former is concerned with expanding man's knowledge of Antarctica itself and includes such studies as those conducted by the Interior Department in Antarctic mineralogy. This type of research would lend itself fairly easily to centralization under an Antarctic commission. The latter category, however, comprises research in fields involving global patterns, and such data obtained in the Antarctic has little value unless compared with similar

⁵U. S., Congress, House of Representatives, Committee on Interior and Insular Affairs, Subcommittee on Territorial and Insular Affairs, Hearings on Deep Freeze 1963-64 Operations, 88th Cong., 2nd sess., May 28 and August 10, 1964, Serial No. 29 (Washington: United States Government Printing Office, 1964), p. 15. Testimony of Dr. Laurence M. Gould, Chairman, Committee on Polar Research, National Academy of Sciences.

data obtained in other geographic areas.⁶ This was the research of principal concern during the IGY and is that which offers the greatest and most immediate practical rewards. Such research is best controlled, and its data most conveniently centralized, with regard to scientific discipline, as is presently the case with Antarctic research conducted by such agencies as the Commerce Department's Weather Bureau and Coast and Geodetic Survey and the Army's Cold Regions Research and Engineering Laboratory.

With the National Science Foundation's continuingly satisfactory exercise of its role as clearinghouse for the existence and location of all data relating to the Antarctic, further centralization of Antarctic data appears unwarranted. The failures of previous expeditions to process scientific data once collected have been virtually eliminated, due in part to the fact that under the IGY and the Antarctic Treaty such data must be arranged and compiled for transmission to the World Data Centers.

The Foundation has received criticism for its lack of ability to coordinate all United States Antarctic research, in that any organization could conduct research in the Antarctic if it utilized private funds and provided

⁶House Territorial and Insular Affairs Subcommittee, Hearings on Deep Freeze 1963-64 Operations, pp. 58-59. Testimony of Dr. A. P. Crary, Chief Scientist, Office of Antarctic Programs, National Science Foundation.

for its own logistic support.⁷ Such an eventuality has not occurred since the IGY; but there appears to be no justification for prohibiting any organization not relying on governmental support from conducting research anywhere in the Antarctic it wishes as long as it refrains from acting in a manner contrary to the terms of international agreements in force in the region, even if its research should happen to duplicate work in progress under governmental auspices.

Long-range planning and coordination of Antarctic research programs can be nothing else than imperfect, due primarily to the effect that data obtained in one year has upon research conducted the next. Improvements in this regard have been effected since the IGY, however. Now that support for Antarctic research appears to be permanently forthcoming and operations in Antarctica have become easier and less time-consuming, scientists have become more interested in long-range projects. In addition, with increased experience in Antarctic operations, both the Foundation and the Navy have reached a greater understanding of the

⁷U. S., Congress, House of Representatives, Committee on Interior and Insular Affairs, Subcommittee on Territorial and Insular Affairs, Hearings on Antarctica Legislation--1961, 87th Cong., 1st sess., August 24-25, 1961, Serial No. 11 (Washington: United States Government Printing Office, 1962), p. 24. Statement of Representative John P. Saylor of Pennsylvania.

resources and capabilities of the other.⁸

It is conceivable, however, that an independent executive agency could plan and coordinate the entire scientific program in Antarctica, albeit to no apparent advantage. It is not conceivable that such an agency could assume the roles of the other two organs currently represented in the Antarctic Policy Group, the Departments of State and Defense.

The history of United States Antarctic policy would indicate a major deficiency to lie in the failure of the State Department to concern itself with the Antarctic on a continuing basis up to the International Geophysical Year. That history would also indicate that whatever policies are devised with regard to the Antarctic inevitably affect other United States relations with the nations claiming interests in the region. Rather than creating institutional arrangements that would tend to separate the consideration of Antarctic policy from that of other diplomatic concerns, it would appear more fruitful for the State Department to retain its present role as an active partner in policy decisions by the Antarctic Policy Group.

The debate over the advisability of State Department control versus that of independent agencies over activities

⁸Henry M. Dater, "Organizational Developments in the United States Antarctic Program, 1954-1965," Antarctic Journal of the United States, Vol. 1 (January-February, 1966), p. 32.

conducted primarily in the international arena has not been confined to Antarctica alone. In 1960, Don K. Price, Dean of the Graduate School of Public Administration of Harvard University and member of the President's Advisory Commission on Governmental Organization, wrote:

A . . . problem is the relation of the Secretary of State to those federal agencies operating exclusively in the international field, especially the International Cooperation Administration and the United States Information Agency. The debate has raged for years whether they should be in or out of the Department of State. Each has tried it both ways. . . . One is now in, and one is now out of the Department, and the essential problems of organization of both remains the same: how can they be set up so as to be responsive to the guidance of the Secretary of State, while still relieving him of the operational burden of detailed management, or the political burden of accepting responsibility for them before the Congressional committees?⁹

A case in point, which directly paralleled that of Antarctica, occurred during the early months of the Kennedy Administration. It involved the establishment of a disarmament agency:

The . . . question was the location of the new disarmament agency. Kennedy's "superficial preference," as he told Richard Neustadt, was to put it in the Executive Office of the President;

⁹Don K. Price, "The Secretary and Our Unwritten Constitution," *The Secretary of State*, Don K. Price, ed. (New York: The American Assembly, 1960), p. 179.

nothing, he felt, would demonstrate more effectively the new status and seriousness of the American purpose. On the other hand, as Neustadt persuasively replied, taking disarmament out of the State Department would conflict with the policy of making State the agent of coordination in foreign affairs¹⁰

By substituting 'Antarctica' for 'disarmament' and 'an executive agency,' for 'the Executive Office of the President,' the above arguments become exactly those involved in the debate over Antarctica.

In the case of the disarmament agency, the recommendations of Neustadt, a professor at Columbia University, were eventually approved by the President. The resulting Arms Control and Disarmament Agency was established as a separate unit within the State Department, with its director acting "under the direction of the Secretary of State."¹¹ In addition, the International Cooperation Administration, which Dr. Price had mentioned as being outside the State Department in 1960, was soon to be absorbed by the newly-created Agency for International Development. This agency, in turn, was also placed under the authority of the Secretary of State.¹²

¹⁰Arthur M. Schlesinger, Jr., A Thousand Days: John F. Kennedy in the White House (Boston: Houghton Mifflin, 1965), pp. 472-473.

¹¹U. S., Statutes at Large, Vol. 75 (1961), pp. 631-639. "Arms Control and Disarmament Act of 1961."

¹²Schlesinger, A Thousand Days, pp. 592-593.

With the possibility of serious international repercussions resulting from the Antarctic programs of any nation and the requirements for continuing diplomatic negotiations under the Antarctic Treaty, it also appears undesirable that the consideration of Antarctic policy be divorced from the general responsibilities of the Department of State in the conduct of foreign relations. Moreover, under the present arrangements the Secretary of State is relieved of the two burdens cited by Dr. Price. The operational responsibilities have been vested in the Navy and the National Science Foundation, and congressional committees have apparently held the State Department responsible for only those Antarctic matters relating to foreign relations and international law in general.

In contrast to the cases of the other agencies and endeavors mentioned above, however, it is infeasible, and perhaps impossible, that the State Department exercise complete and undivided control over Antarctic policy and programs. The Defense Department is the only agency possessing the personnel, equipment, and experience necessary to transform policy into concrete programs in the field, and its corresponding role in Antarctic affairs is simply too immense for it not to be involved in the formulation of policy. Inasmuch as only the Defense Department, and primarily the Department of the Navy, is in a position to determine what can or cannot physically or safely be accom-

plished in the Antarctic, the attempts by Presidents Franklin D. Roosevelt and John F. Kennedy to award the Defense and Navy Departments formally subordinate roles in policy decisions were doomed to failure. For example, on May 29, 1940, some 11 months after the Interior Department had been assigned formal control of the United States Antarctic Service, Interior Secretary Harold L. Ickes sent the following letter to President Roosevelt:

As the situation now stands, although this Department has full responsibility for the expenditure of the appropriations, it has no authority whatsoever over the administration of the projects. . . .

Upon practical analysis it is revealed that the Department of the Navy is vested with complete authority for the administration of the United States Antarctic Service. . . .

In the circumstances, I strongly recommend that any further appropriations for the United States Antarctic Service be made to the Department of the Navy. . . .¹³

Inasmuch as President Roosevelt had previously decided that the Antarctic territory to be claimed by the United States would be administered by the Interior Department, he replied on June 8 that the changes recommended by Secretary

¹³Secretary of the Interior to President, May 29, 1940, in Charles E. Dwyer and Laura E. Kelsay, compilers, "Records of the United States Antarctic Service," Preliminary Inventories of the United States National Archives, No. 90 (1955), p. 5.

Ickes "would not be desirable at that time."¹⁴

Similarly, the State Department found itself unable to fully exercise the responsibility for overall coordination of Antarctic affairs in the early 1960's, even with the assistance of its interdepartmental committee. This situation led to the creation of the Antarctic Policy Group in 1965.

In summary, it would appear that the retention of the present arrangements for the formulation and conduct of United States Antarctic policies and programs is in the best interests of the United States. The roles of the three agencies represented in the Antarctic Policy Group are each vital and of approximately equal importance to the United States effort in Antarctica, and it is neither feasible nor particularly desirable that any one of these agencies should exercise paramount control over that effort.

Moreover, the principal deficiencies of United States Antarctic policy in the past have not been due to a lack of coordination among government agencies once the mechanism for such coordination had been established. Indeed, the activities of the United States Antarctic Service were coordinated so successfully on the operational and diplomatic

¹⁴President to Secretary of the Interior, June 8, 1940, in Dewing and Kelsay, "Records of the United States Antarctic Service," p. 5.

levels that the conflicts foreseen with the South American claimants never materialized. There were problems between the Antarctic Service and the scientific community; but these have been eliminated by the practice, established during the IGY and still in existence, of affording the scientists an official voice in Antarctic affairs. The apex of successful interdepartmental planning occurred with the consultations and preparation of position papers prior to the multinational discussions of 1958-1959. At that time, each agency with interests in the Antarctic was given, in effect, a veto over any formal proposals made or accepted by the United States. Although such an arrangement appears unwieldy, the success of the Antarctic Conference of 1959 and the subsequent treaty cannot be denied.

As long as multinational discussions on the Antarctic continue to be held on a regular basis and the United States continues to possess direct incentives for operations in the region, it is to be expected that the present arrangements, or ones similar to them, will remain in existence to consider broad aspects of Antarctic policy on a continuing basis, to promote United States interests in the region, and to be in a position to react relatively quickly to unforeseen eventualities. Neither the permanent nature of United States activities in the Antarctic nor the continued existence of these governmental arrangements can be taken for granted, however. It will be remembered that the United

States Antarctic Service was thought to be a permanent organization in early 1940 but was disbanded soon after the United States had ceased operations in the field, and it is by no means impossible that some future urgent need of the United States Government to expend funds or deploy naval forces elsewhere could lead to a cessation of activities in the Antarctic. In such a case, it would be imperative that the United States break with past tradition and retain the internal arrangements for the broad consideration of Antarctic policy. The State Department, in particular, must maintain a continuous interest in all political or technological developments affecting the United States position in Antarctica--regardless of fluctuations in the scale of United States operations on the continent itself. To do otherwise would be to risk losing for all time the voice and the role that the United States now possesses in the future of the region.

With regard to the future of the Antarctic itself, the success of the Antarctic Treaty seems to preclude both a return to the active rivalries that have existed in the region in the past and any final division of the continent into national sectors. The Meetings of Consultation have demonstrated the willingness and the ability of the participating nations to reach agreement in new areas, and it is probable that agreement will be reached in the future on matters such as the conduct of directly remunerative activi-

ties. In fact, one such activity is already being conducted in Antarctica, and no apparent international disputes have resulted. That activity is tourism.

The first tourist excursion to Antarctica was organized by the Argentine Navy in 1958. This was soon followed by a similar excursion under the auspices of the Chilean Navy. In 1966, private enterprise became involved through the Lindblad Travel Agency of New York, which organized a tour of the Palmer Peninsula region aboard a chartered Argentine transport. This tour included visits to Antarctic stations occupied by the United States, the United Kingdom, and Argentina, and was so successful that it was repeated with the same itinerary in 1967.¹⁵ In early 1968, the Lindblad Agency sponsored two Antarctic tours aboard a vessel chartered from the Chilean Government. The itineraries that year included visits to the Falkland and South Shetland Islands in addition to British, Chilean, and United States

¹⁵"Tourism in the Antarctic, 1967," The Polar Record, Vol. 14 (January, 1968), p. 73.

Antarctic stations.¹⁶ All tourists have been treated with hospitality everywhere in the Antarctic, despite the fact that free access to the region had been granted by the Antarctic Treaty to scientists and official observers only.

Future agreement on the exploitation of Antarctic resources could take various forms, ranging from the mere establishment of guidelines to the formation of multinational stock companies.¹⁷ If the activities concerned do not offer vast profits and are not beyond the technological capabilities of any of the nations involved in the region, as in the present case of tourism, such agreement may consist of nothing more than the tacit acceptance of any nation's right to engage in those activities. In the case of remunerative activities involving highly sophisticated technology, the claimants would probably demand some arrangement whereby profits are shared among all the nations.

¹⁶John Cadwalader, "Antarctic Peninsula Tourism in 1968," *Antarctic Journal of the United States*, Vol. 3 (July-August, 1968), pp. 149-150.

NOTE--In 1964, the United States, Australia, New Zealand, and the United Kingdom agreed to use the name 'Antarctic Peninsula' for the territory which had previously been called the 'Palmer Peninsula' by the United States and 'Graham Land' by the nations of the British Commonwealth. Argentina and Chile continued to call the peninsula 'San Martin Land' and 'O'Higgins Land' respectively. "Agreement on Disputed Antarctic Place-Names," *The Polar Record*, Vol. 12 (January, 1965), pp. 470-471.

¹⁷Philip C. Jessup and Howard J. Taubenfeld, *Controls for Outer Space and the Antarctic Analogy* (New York: Columbia University Press, 1959), pp. 186-189.

Argentina and Chile, in particular, have consistently feared the results of any future competition with the Great Powers for exploitable Antarctic resources; and this fear has been an important factor in their desire to exercise sovereignty over certain sectors.

Most important to the prospects of future agreement in the Antarctic are the positions of the United States and the Soviet Union. As the nations with the greatest scientific and technological capabilities, both can be expected to continue to support arrangements providing them with free access to the entire region. In addition, as more and more nations without prior bases for claims become active in the Antarctic, the possibility of a retreat from the present system of international controls becomes more remote still. Since 1959, such nations have acceded to the Antarctic Treaty at the rate of approximately one every two years: Poland on June 8, 1961, Czechoslovakia on June 14, 1962, Denmark on May 20, 1965, and the Netherlands on March 30, 1967.¹⁸ These four nations have so far limited their Antarctic activities to participation in multinational programs and therefore do not possess voting rights at the Meetings of Consultation. It is probable, however,

¹⁸"Antarctic Treaty 1959: Accessions," The Polar Record, Vol. 14 (January, 1968), p. 74.

that any development significant enough to threaten the political stability of the region would lead these and other nations to increase their activities to levels affording them voices in the issue.

In the final analysis, the claimants can be expected to be faced in the future with the same two alternatives that they possessed with regard to the IGY and the Treaty--to defend by force the exercise of sovereign rights within their sectors or attempt to obtain the most advantageous compromise with those nations favoring international arrangements.

The true internationalization of Antarctica under an organ such as the United Nations is equally as improbable as a regime of separate national sectors. The Treaty signatories have consistently opposed participation in Antarctic affairs on the part of nations not actively involved in the region and have expressly prohibited subsequent adherents to the Treaty from participating in the Meetings of Consultation until they demonstrate an interest in the Antarctic "by conducting substantial scientific research activity there, such as the establishment of a scientific station or the despatch of a scientific expedition."¹⁹

¹⁹U. S., Department of State, "The Antarctic Treaty," United States Treaties and Other International Agreements (Washington: United States Government Printing Office, 1961), Vol. 12, pt. 1, p. 798.

The interest of the United Nations itself in the Antarctic has thus far been minimal. In 1947, the Trusteeship Council received a group of petitions from the Women's International League for Peace and Freedom of Geneva calling for the establishment of Arctic and Antarctic trusteeships. The Council was of the opinion, however, that the matter was beyond its competence and accordingly resolved to take no action.²⁰

Nine years later, on February 21, 1956, India proposed that the question of arrangements guaranteeing the peaceful use of Antarctica be placed on the provisional agenda of the Eleventh General Assembly. Believing that the Antarctic possessed a strategic, climatic, and scientific importance not just to the nations historically active in the region but to the entire world, the Indian Government desired that agreement should be reached among all United Nations members on the following items: (1) the utilization of Antarctica solely for peaceful purposes, (2) the non-utilization of Antarctica for any purpose causing an increase in world tensions, and (3) the prohibition of activities in Antarctica that could be detrimental to world

²⁰United Nations, Trusteeship Council, Official Records (1947), Vol. 2, pp. 62-68.

climatic conditions.²¹

The Indian proposal was subsequently withdrawn, due primarily to Argentine and Chilean objections, but was renewed on July 15, 1958, some 10 weeks after the United States had sent the formal invitations to the Conference on Antarctica. Mistrustful of the nature of whatever agreement might be reached among the 'interested' nations alone, India reiterated its belief that the action that it proposed should only be taken by "the world community as a whole."²² In view of the impending conference, the opposition of the 'interested' nations was even heavier than it had been in 1956; and India withdrew its proposal for the second time.²³

With the success of the Treaty in obtaining a reduction of tensions over the Antarctic and the fact that any member of the United Nations may obtain a voice in Antarctic matters by expending the resources necessary to demonstrate its interest, no further attempts have been made toward achieving a system of less-exclusive international participation in the affairs of the region. The impetus

²¹United Nations, Official Records of the General Assembly, Question of Antarctica, U. N. Doc. 19/3118, February 21, 1956, p. 2.

²²United Nations, Official Records of the General Assembly, Question of Antarctica, U. N. Doc. A/3852, July 15, 1958, pp. 2-3.

²³Jessup and Taubenfeld, Controls, p. 174.

for such an arrangement can be expected to exist in the future only if the Treaty should be amended to restrict the right of accession or if the participants should engage in activities, such as weather control, which threaten direct effects on non-involved nations.

On the basis of all the above considerations, it appears most probable that the political arrangements currently existing in Antarctica will remain in existence for some time, with the levels of multinational control and cooperation gradually being extended as the participants achieve agreement in new areas. The increased administrative tasks accompanying this extension could lead, in turn, to either the evolution of the Meetings of Consultation into a permanent governing board or the creation of a joint *ad hoc* administrative regime, perhaps similar to that created by the United States and the United Kingdom in 1939 for the administration of Canton and Enderbury Islands.²⁴

The above analysis has been based, however, upon two assumptions that cannot be taken for granted by the United

²⁴United States Secretary of State Hull to British Ambassador in Washington, Sir Ronald Lindsay, April 6, 1939, in U. S., Department of State, "Conflicting American and British Claims to Various Islands in the Pacific Ocean; Agreement for the Joint Administration of Canton and Enderbury Islands, Effected by Exchange of Notes, April 6, 1939," Foreign Relations of the United States, 1939 (Washington: United States Government Printing Office, 1956), Vol. 2, pp. 313-314.

States Government. The first assumption is that any additional nations becoming engaged in Antarctic operations will either adhere formally to the Treaty or abstain voluntarily from activities prohibited by the Treaty. If a nation should refuse to do either and should commence activities of a military nature, it might well become necessary for the Treaty signatories to follow suit if they find themselves unwilling to take action, either singly or jointly, against that nation; and it is doubtful that the resulting militarization of Antarctica would be conducive to the continued existence of cooperative international arrangements. The second assumption is that future developments will not cause Antarctica to become so economically or strategically valuable that nations might find the continent, for the first time in its history, worth fighting over. The continuing possibility that either assumption might be proved invalid in the future makes it particularly imperative that the United States retain an interest in Antarctic matters unrelated to the existence or non-existence of incentives of an immediate nature.

In all likelihood, however, the international arrangements instituted over the Antarctic will continue to enjoy the successes that they have enjoyed during the 1960's; and the fact of these successes has given rise to discussion on the applicability of some or all of these arrangements to other areas of possible conflict.

In this regard, it must be remembered that the significant provisions of the Antarctic Treaty did not seek to alter the current conduct of the Contracting Powers but rather to formalize certain desirable aspects of the status quo in the region. Consequently, the Treaty itself has little direct relevance to problems or areas where it is precisely a change in the status quo that is desired, as in regions which are already the site of military activity or in problems of disarmament in general. Moreover, the failure on the part of the Contracting Parties to achieve, even up to the present (1969), any agreement on the economic exploitation of the Antarctic causes the Antarctic settlement to be valueless as a precedent for regions where economic activity is either an important factor at present or is expected to become so in the near future.

The region in which the arrangements achieved over the Antarctic appear to be most directly applicable is outer space. There, as in the Antarctic, no indigenous population is known to exist, militarization has not been attempted, and scientific investigation is expected to remain the principal activity for some time. From the standpoint of possible international agreement, however, the two regions possess important differences.

Firstly, differences in the technologies involved in the conduct of operations in the two regions are of a crucial political significance. There are five principal ve-

hicles utilized at present in the exploration of Antarctica and in support of Antarctic operations: icebreakers and other vessels reinforced for polar service, propeller-driven airplanes, helicopters, snow tractors, and dogsleds. Even though all these vehicles have some relevance to warfare, the technologies involved in their manufacture and operation have been available to all nations for a considerable period of time. Little objection therefore exists to their inspection by foreign observers or to the unlimited exchange of data relating to their use. In contrast, transportation in outer space is accomplished through the use of rockets similar, and in some cases almost identical, to those involved in the ballistic missile, one of the most highly sophisticated weapons in the arsenals of the major powers. In the absence of either a general political settlement or developments in weaponry which serve to eclipse the importance of rockets to the national defense, it is doubtful that agreement can be reached on arrangements of unlimited inspection and data exchange for outer space in general.

Secondly, an effective system to insure the nonmilitarization of outer space would require the right of inspection of manufacturing centers, storage facilities, and launching areas; and no major power has yet shown itself willing to grant to foreign observers the right of unlimited

access to any and all parts of its national territory.²⁵

This right was not believed to be necessary in the case of Antarctica, where a nation would presumably require an extensive period of preparation in the field before it could be in a position to pose a direct military threat. In contrast, a weapon of mass destruction can be placed in outer space in a matter of minutes.

The above differences between the two regions are reflected in a comparison between the Antarctic Treaty and the 62-nation Outer Space Treaty of 1967, both of which deal with the questions of nonmilitarization, inspection, data exchange, free access, and the status of national claims. It is interesting to note that in cases where similar conditions for agreement did exist in both regions, articles of the latter treaty were patterned after those of the former to the point of almost identical wording.

In its provisions regarding nonmilitarization, the Outer Space Treaty is much less comprehensive than the Antarctic Treaty, inasmuch as conditions similar to those in the Antarctic existed only on celestial bodies and not in outer space itself. In the sense that the flight paths of ballistic missiles involve a period of transit through space, the region had already been the site of extensive

²⁵Howard J. Taubenfeld, "A Treaty for Antarctica," *International Conciliation*, No. 531 (January, 1961), p. 302.

weapons testing. In the face of the additional difficulties posed by the direct connection between civilian and military rocket technology and the impossibility of agreement on an effective system of inspection, the signatories to the Outer Space Treaty agreed only to the general prohibition of "nuclear weapons or any other kinds of weapons of mass destruction."²⁶ In the case of celestial bodies, however, neither had military activities previously taken place nor was the inspection of national territory required for a reasonable level of security against possible violations of an agreement on full nonmilitarization; and the provision in this case was worded almost identically to Article 1 of the Antarctic Treaty:

The moon and other celestial bodies shall be used by all States Parties to the Treaty exclusively for peaceful purposes. The establishment of military bases, installations and fortifications, the testing of any type of weapons and the conduct of military maneuvers on celestial bodies shall be forbidden. The use of military personnel for scientific research or for any other peaceful purposes shall not be prohibited.²⁷

The right of inspection under the Antarctic Treaty is both unilateral and unlimited. That granted by the Outer

²⁶"Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies," Department of State Bulletin, Vol. 55 (December 26, 1966), p. 953.

²⁷*ibid.*, p. 953.

Space Treaty is neither. The Outer Space Treaty states merely that the Parties agree to "consider on a basis of equality any requests by other States Parties to the Treaty to be afforded an opportunity to observe the flight of space objects launched by those states."²⁸ Even facilities on celestial bodies are to be open to the representatives of other signatories only "on a basis of reciprocity" and upon "reasonable advance notice of a projected visit."²⁹

Provisions concerning the sharing of data, which offered a significant, tangible incentive for agreement on matters relating to the Antarctic, also appear in the Outer Space Treaty subject to qualifications. The signatories are required to disseminate data on their space activities only "to the greatest extent feasible and practical."³⁰

In one respect, conditions in outer space were more conducive to agreement than they had been in Antarctica. No claims to national sovereignty had been asserted over outer space or celestial bodies, and the signatories to the Outer Space Treaty were able to take significant steps toward eliminating the possibility of future disputes over this issue. The right of free access to the region was

²⁸"Treaty on . . . Outer Space," p. 954.

²⁹Ibid., p. 955.

³⁰Ibid., p. 954.

granted to all nations without qualification, and it was further agreed that the region "is not subject to national appropriation by claim of sovereignty, by means of occupation, or by any other means."³¹

Following the lessons of the Antarctic experience, the negotiators of the Outer Space Treaty did not jeopardize the entire agreement by insisting upon unanimity in matters of a highly controversial nature. Like the Antarctic Treaty, the Outer Space Treaty served to formalize desirable aspects of the status quo, and the status quo in outer space was significantly less conducive to international agreement in all respects save that of national claims. Developments in the Antarctic since 1959 have indicated, however, that the reduction in political tensions occasioned by limited agreement can act to facilitate further agreement in the future. In this regard, even though the specific international arrangements existing in the Antarctic may have little direct relevance to the problems of other regions, the symbolic value of the Antarctic settlement is very great indeed.

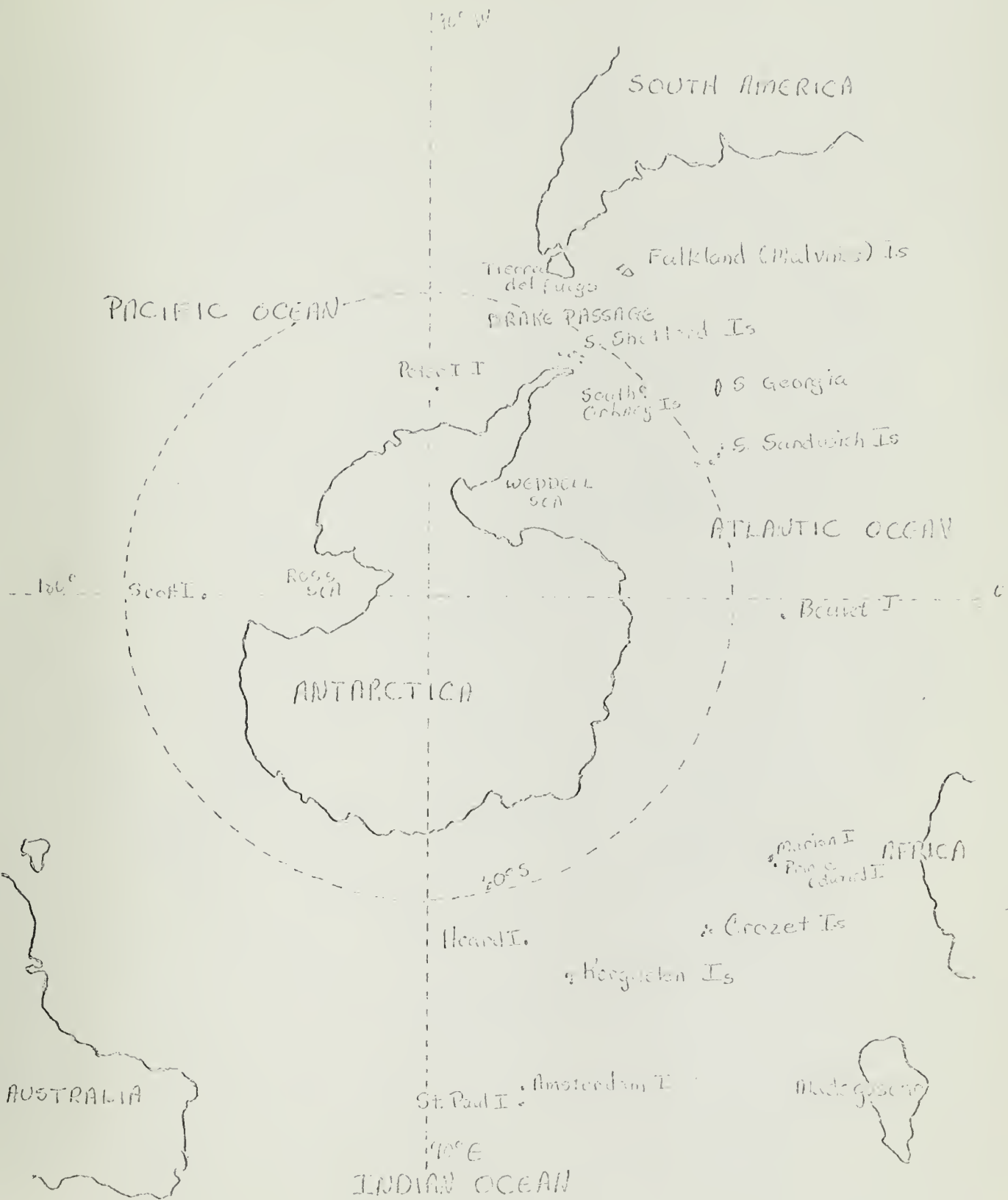
Twelve nations of varying, and often conflicting, political philosophies have demonstrated in Antarctica that a regime of mutual cooperation can be successfully estab-

³¹"Treaty on . . . Outer Space," p. 953.

blished over a large portion of the globe; and this demonstration has already yielded practical results in the establishment of a similar, though less comprehensive, regime over outer space. [In addition, the Antarctic Treaty was the first in a succession of significant Cold-War agreements, which included the Limited Nuclear Test Ban Treaty of 1963, the Outer Space Treaty of 1967, and the Nuclear Non-Proliferation Treaty of 1968. None of these agreements provided final solutions to the respective issues involved, but all represented significant steps toward those solutions; and "it was in the coldest of all continents that there was the first memorable thaw in the cold war."³²

³²U. S., Congress, Senate, Committee on Foreign Relations, Hearings on the Antarctic Treaty, 86th Cong., 2nd sess., June 14, 1960 (Washington: United States Government Printing Office, 1960), p. 76. Testimony of Dr. Gould.

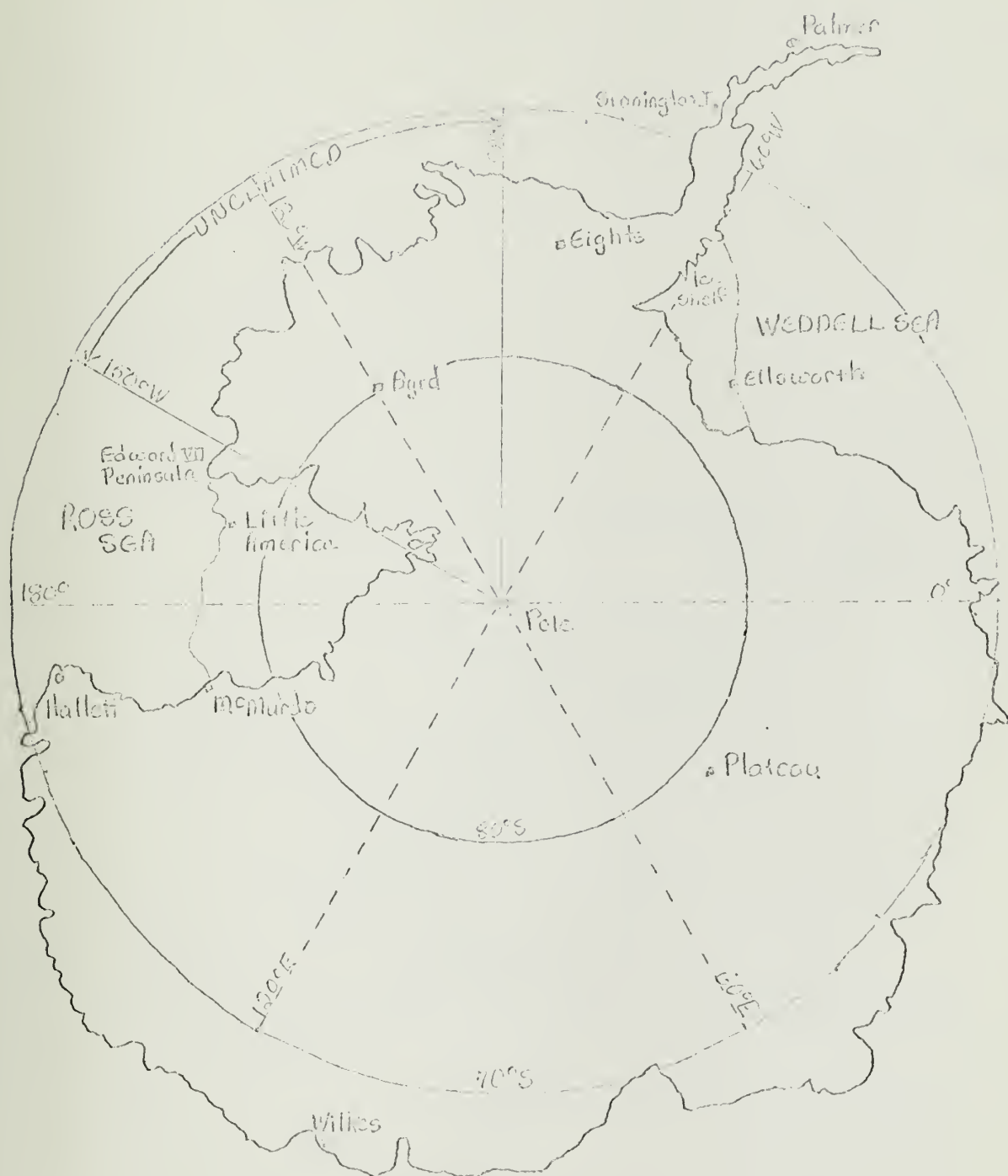
THE ANTARCTIC REGIONS



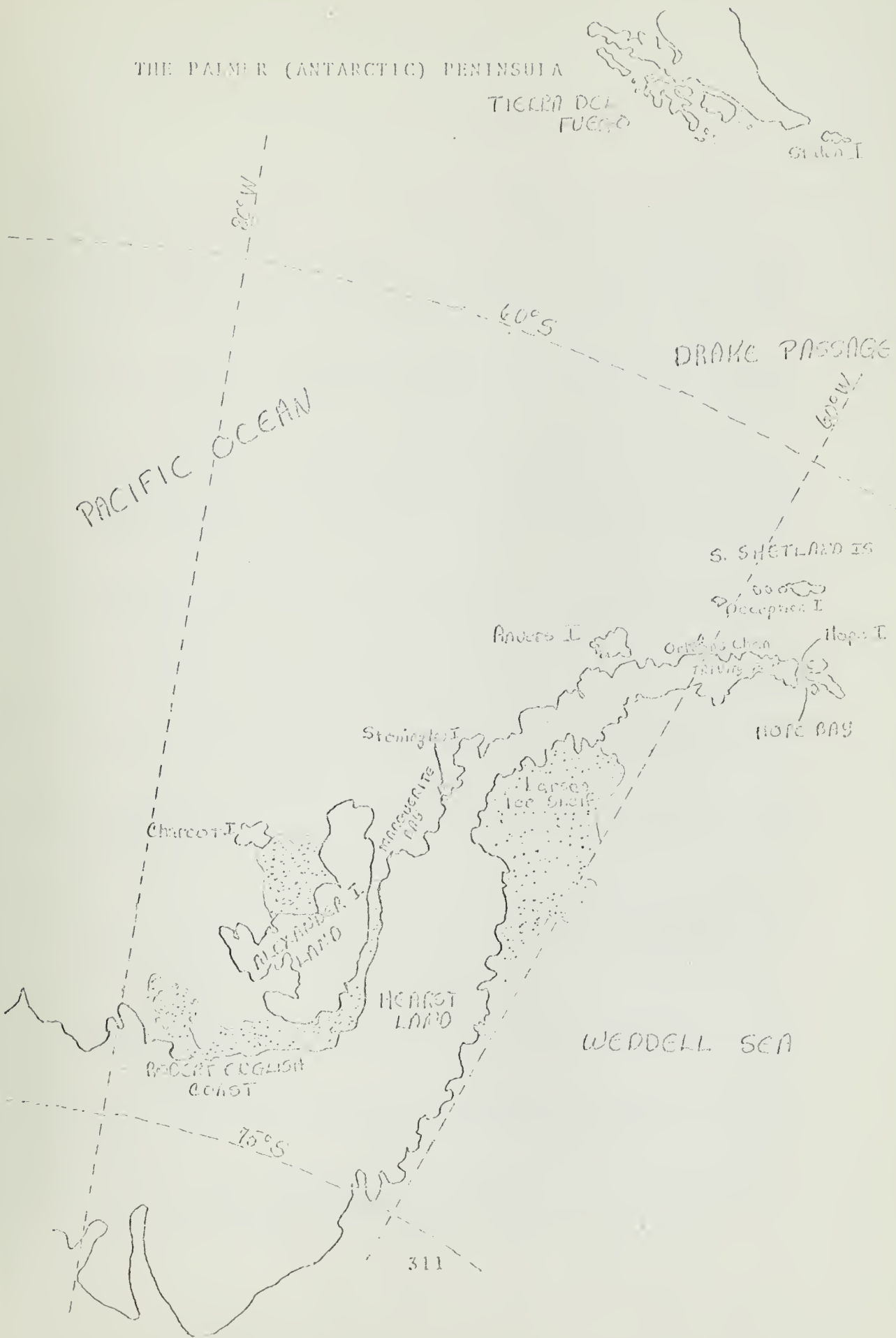
ANTARCTIC CLAIMS



UNITED STATES ANTARCTIC STATIONS



THE PALMER (ANTARCTIC) PENINSULA



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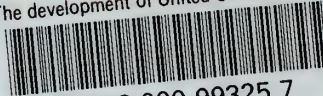
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